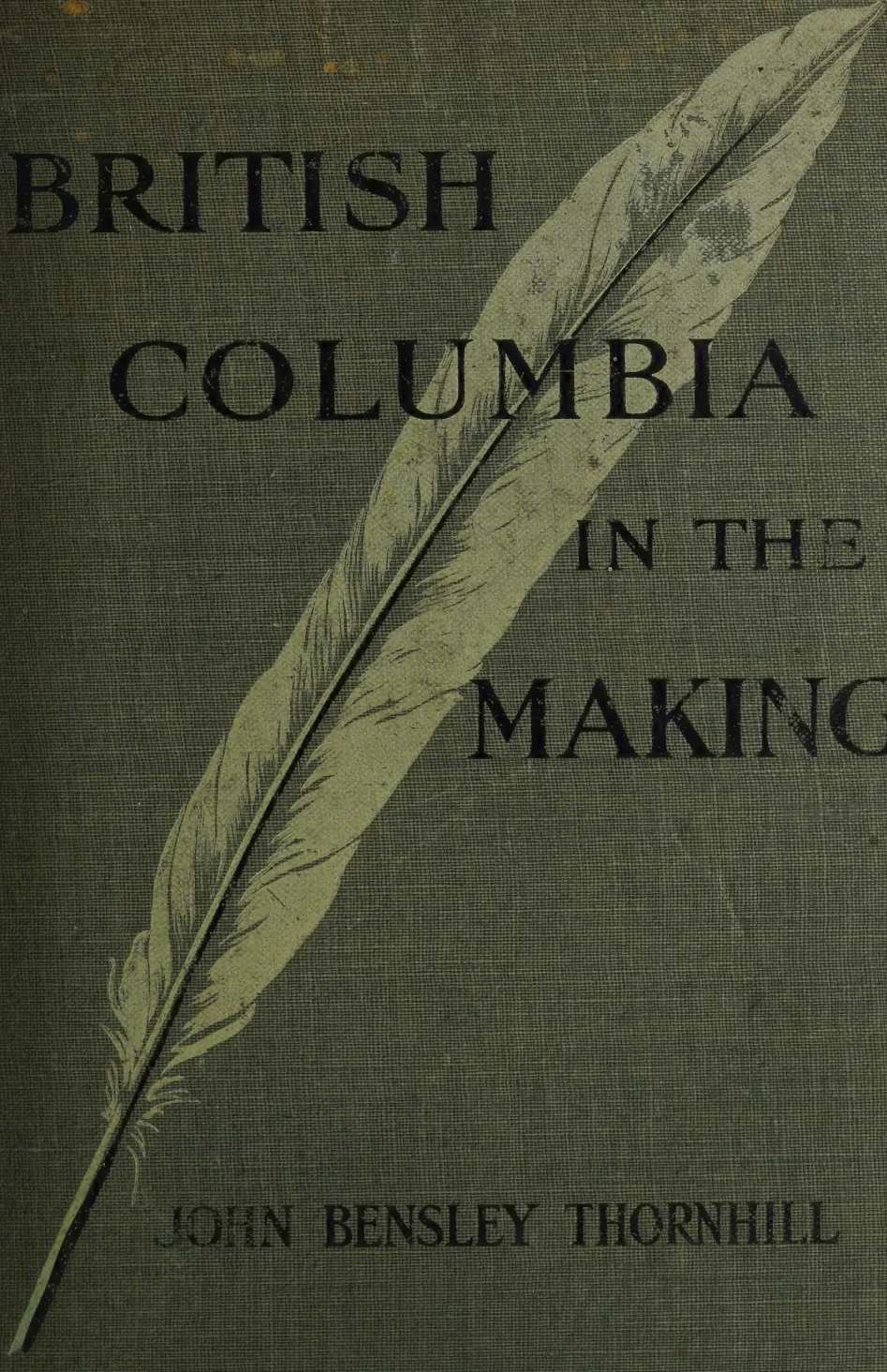
BRITISH COLUMBIA IN THE MAKING



JOHN BENSLEY THORNHILL

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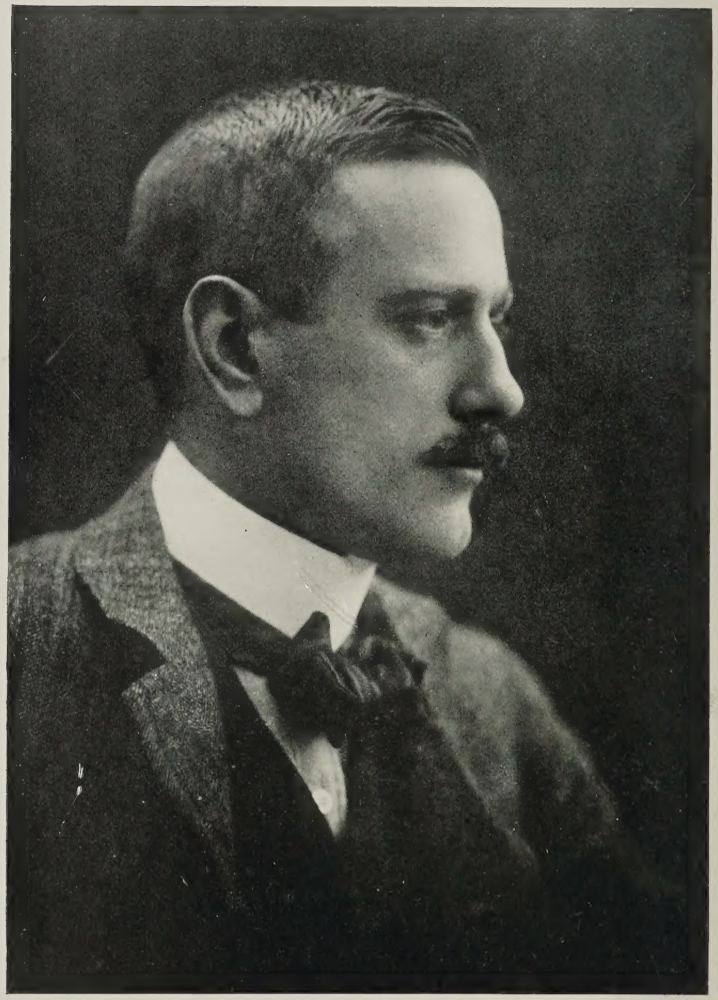


Photo by C. G. Beresford, Yeoman's Row, S.W.

THE AUTHOR

BRITISH COLUMBIA IN THE MAKING

1913

By JOHN BENSLEY THORNHILL,
F.R.G.S.

ILLUSTRATED

CONSTABLE & COMPANY LIMITED
LONDON 1913

To
MY SISTER

INTRODUCTION

The British Empire, and with reason, has been described as one vast commercial concern. My object in writing this book is to draw attention to British Columbia, and to show that there is something in it more than sentiment.

The twentieth century of the world's progress is Canada's, and the Pacific is the Ocean of the Future. Yet, despite the advertising both have received, less is known of them in England and the world generally than is their due. Both the books and the Government pamphlets bewilder, and the cruel game of selling rotten real estate to maiden ladies, retired military officers, and the classes least able to look after their investments, has the effect of giving Canada—especially its "Golden West"—a bad name.

In my chapter on "Real Estate, Speculation, and Investment" I do my best to influence capital from the older settled countries, and to indicate the chances offered in a country that has been barely scratched. I cannot too strongly point out that, although big money has been made in land speculation, there is far more money (and certain money at that) in industrial development, and especially in mining, lumbering and fishing.

Farming, in a country in which the industries have

already got a long start of agriculture, offers great opportunities. To grasp these opportunities to their full it is necessary that the Government, either on its own or in conjunction with independent finance, should inaugurate a constructive policy. This policy should embrace a well-thought-out scheme of land clearing, the assisting of agricultural labourers to emigrate, the establishment of rural credit banks, and a more comprehensive system of roads in connection with the wise railway policy of the McBride Government.

My chapters deal first with the "History" and "Geography" of the country—subjects which only a man with literary merit (to which I lay no claim) could make anything but dry.

The chapter on "The Great Carrying Companies of Canada and their Pacific Ports" calls for my thanks to the officers of the Canadian Pacific Railway and the Grand Trunk Pacific Railway. The powerful syndicate at the back of Mackenzie and Mann furnished me with no information, as their manager chose to consider that I was as well informed as he. If, therefore, I have failed to do justice to the Canadian Northern system, the fault is theirs and not mine.

I have no interests in "Stewart, the Portland Canal District, and its Mines." My information is given away to ensure a wide circulation for my book, and to show that the chances to-day in British Columbia are better than they ever have been. A word of warning with regard to this chapter—I do not want anyone to buy real estate on what I have written. Still less do I want people to buy Portland Canal mining shares at present, because I do not believe that the local financiers

on the coast will succeed in getting enough money to work the mine at a profit. If, however, a *good* London outfit tackles the thing, I say, "Go for it."

"Geology, Mining, and Mining Laws" took some writing to get it in shape, and follows in natural sequence to the description of one mine and its surrounding district.

The chapter on "Forestry and Lumbering" does not do these resources justice. The possibilities here are so great that I can only roughly indicate them. I feel I am absolutely right in describing the forests of Vancouver Island as "The Eighth Wonder of the World."

Of the "Fisheries and their Future" it has been officially stated that the British Columbian waters could find work for a million men. In the expressive language of the coast, the "dope" is there, but the trouble is to market it. Although I do not like the outfit, I look to great things from Sir George Doughty's enterprise, which should be in working order by the time the Grand Trunk Pacific is through. Sound colonisation schemes in conjunction with the development of the fisheries deserve both Governmental and financial encouragement.

The chapters on "Opportunities," and "Land, How Acquired, Laws, Taxes, and Farming," will appeal to all, and especially to intending settlers. I expect some severe criticism from the real estate men for saying that "Fruit is foolishness." I also expect a well-merited contradiction for my statement that crops cannot be grown in the northern interior. Still, I am prepared to defend my generalisation that this part of the country

is more suited for hay and stock raising. Under certain circumstances and in certain places crops have been successful, but this has depended on the isotherms, latitude, and altitude, as well as favourable local conditions.

" Land Clearing and Finance " is my special chapter. The settlement of the coastal belt is of the highest political importance, and I hope great attention will be paid to this chapter. Anyone who can solve the problem of land clearing in all its details, including finance, has a fortune waiting for him. More than this, he will render a great service to the Crown, for the coastal belt is Canada's western frontier and the Empire's hold on the North Pacific.

In " Prospective Developments," and in my chapter on " Real Estate, Speculation, and Investment," I have taken great pains. I hope these chapters will be of value to my readers.

" The Professions and their Field " is written for professional men who feel that their chance in England is small, and who are looking for fresh openings. The chapter will be of service to retired people who are prepared to come to a new country to start their children in life.

In " Government and Politics " I virtually ignore party politics and only deal with their higher side—doing real good to the province of British Columbia, the Dominion of Canada, and the Empire at large.

" Pleasant Reminiscences," I hope, will interest the reader, and relieve any tedium experienced in going through my book.

" What I Want to Do " speaks for itself.

The book may have faults, but should have undoubted value. It is the result of three years' experience of field and office in British Columbia and a month's hard work in London.

The sources from which I obtained the portraits and scenic illustrations are acknowledged under each one. Messrs. Sifton, Praed & Co.'s draughtsmen prepared the small maps under my direction. The preparation of my big map has been the work of Miss M. Addison, and I am very satisfied with her splendid interpretation of my rough working drawing.

I am indebted to Monsieur Métin's very excellent book, "La Columbie Britannique," for much of the history and geography. I have made use of Mr. Gosnell's "Handbook of British Columbia" as a book of reference. I take this opportunity of thanking my friend, Mr. E. B. McKay, who has recently retired from the Surveyor-Generalship of the colony, for his kindly help and criticism.

J. B. THORNHILL.

10, Barton Street,
Westminster, London, S.W.

Whitsuntide, 1913.

NEW PRE-EMPTION LAW

Pre-emption (*i.e.*, acquiring land from the Crown by a very small payment, fulfilling certain residential conditions, and doing a small amount of improvements) is dealt with on pages 95, 96. Under the new law, the payment (other than the fee for recording, 8*s*., and the fee for granting the freehold, £2) is done away with. The residential conditions are made harder, for three years' residence is required instead of two. The improvements must be worth £160 instead of £80. Otherwise there is no difference from what I have written, and I still recommend purchase rather than pre-empting.

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BRITISH COLUMBIA IN THE MAKING, 1913

CHAPTER I

HISTORY AND DEVELOPMENT

EUROPEAN enterprise in British Columbia began by way of the Pacific Ocean. The first in the field were the Spanish sailors sent by the Viceroys of Mexico. As the accounts of their voyages were generally kept secret, for a long time the world only knew of their discoveries by vague rumours in which it was difficult to distinguish truth from falsehood.

Drake's freebooting voyage in 1577—1579 for the laudable object of looting the Spanish settlements may be said to be the beginning of the history of our hold on British Columbia. Incidentally he sailed round the world on this voyage, being the first Englishman to make this achievement. Before quitting the Pacific Coast, in a little bay just north of San Francisco he planted a post with Queen Elizabeth's name on it and the date. Underneath the post he buried a sixpence and claimed the country and its inhabitants for the Crown, giving it the name of New Albion.

After these earlier efforts, more than a century went

by without Europeans trying to establish themselves on the coast and question the Spanish possession. In the seventeenth century the Russians appeared in the field, coming from Siberia. In the wake of Behring, who between 1725 and 1741 explored the sea which bears his name for the Russian Government, came their fur traders buying sealskins and foxskins to re-sell in Europe and China. On account of the Russian effort, two expeditions were sent out by Spain, and formal possession was then claimed up to the forty-ninth parallel, the present southern frontier of Canada.

North of the forty-ninth parallel and south of the Russian sphere, the Spaniards were opposed by ourselves. In 1778 Captain Cook on the third of his great voyages, ignoring the straits between Washington and Vancouver Island named after that liar Juan de Fuca, and taking the west coast of Vancouver Island for part of the mainland, established himself in Nootka Sound. Nootka has made history in the past, and it is quite possible that if the dream of connecting Vancouver Island with the mainland ever materialises, Nootka may yet become a place of some importance.

Following in the footsteps of Cook, Quadra's expedition advanced the Spanish claim as far as the fifty-eighth parallel.

Cook's expedition had far-reaching effects. In the accounts of his voyage, which were published after his death, a description of the sea-otter was given, and its skin was stated to be equal to that of the common otter. These skins were selling well on the other side of the Pacific in the Chinese Empire, and the East India Company, who then had a monopoly of the Chinese

trade, were already in the field. Their successes led to expeditions being fitted out in Bombay, Boston, Marseilles and other ports of the world, where enterprising merchants saw the opportunities in the fur trade. The results of these efforts were the discoveries of the Queen Charlotte Islands, and more of the coast of British Columbia, and the unfortunate Nootka incident, which very nearly led to England going to war with both France and Spain. However, councils of peace prevailed, and England secured a decided diplomatic success in the Convention of Nootka, November 22nd, 1790. By this treaty, Spain recognised the English right of navigation and trade on the North Pacific coast; England engaged not to found any trading station within thirty miles of a Spanish post; Spain withdrew her claim to a monopoly of the whole of the North Pacific, and a joint expedition commanded by Captains Quadra and Vancouver was sent out to define the extent of the Spanish and English spheres.

It is to Vancouver that the first serious survey of our North Pacific coast is due. Sailing slowly along, with his ships' boats ahead to guide the way, he made the passage through the then uncharted Seymour Narrows, where in certain states of the tide the current runs fourteen miles an hour, and thus proved the land of Nootka (a country larger than Switzerland) to be an island and not part of the mainland of Canada.

His name, his work and memory have been honoured by all. In the State of Washington, near Portland, the capital of Oregon on the Columbia River, there is a thriving town of 9,000 inhabitants called after him.

The western terminus of the Canadian Pacific Railway, the city of Vancouver, is known to everyone. His statue, clad in beaten gold, crowns the dome of the Parliament buildings of Victoria and looks northward over the island that bears his name.

Vancouver's expedition returned to England at the time of the French Revolution, and the British and Spanish Governments were then in complete alliance. By the Treaty of Madrid, 1794, Spain recognised Nootka as an English post, without abandoning her claims on the rest of the country.

Without difficulty Vancouver Island became English and the coast of the mainland remained nominally Spanish. But the Napoleonic wars, followed by the revolt of her own colonies, fully occupied the attention of the Spanish Government, and they made no serious attempt to colonise any of the coastal belt of British Columbia. The Republic of Mexico, which had replaced Spain on the Pacific Coast of Western America, claimed only the seaboard of California, and a very small part of what is now the State of Oregon.

Although Captain Vancouver explored the coast, the explorations inland are due to Sir Alexander Mackenzie, who, starting from the settled districts of eastern Canada, made the first overland journey through that part of the Rocky Mountains which lies in British territory. Mackenzie was an employé of the North-West Fur Trading Company, an enterprise that was subsequently amalgamated with its greater rival, the Hudson Bay Company, to whom our possession of Western Canada is largely due. Mackenzie after a

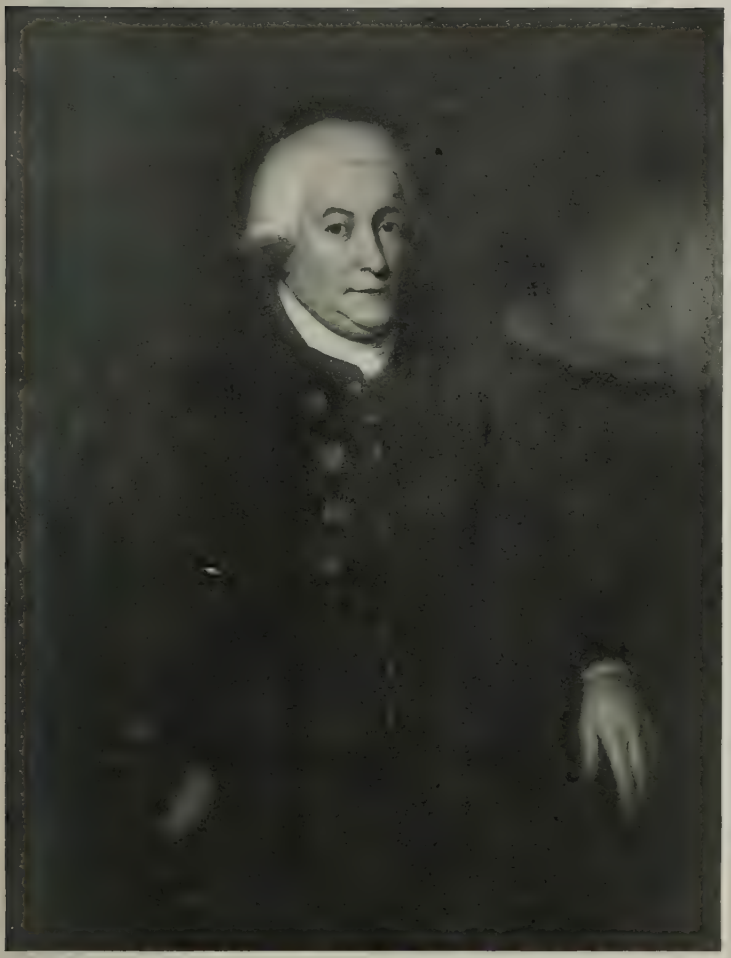


Photo by Emery Walker, 16, Clifford's Inn, E.C.

CAPTAIN GEORGE VANCOUVER,

Royal Navy, who with *H.M.S. Discovery* and *H.M.S. Chatham* accurately mapped the Coast line of the North Pacific from San Francisco, northwards, 1792—1795
Picture by Abbot, in National Gallery.

hard trip, travelling in canoe by the waterways, and making transportages along Indian paths, came out at the head of Burke Inlet, at a point which is now the town of Bella Coola.

It is interesting to note that nearly all the points where the Hudson Bay Company established themselves are places of economic importance. It is likely that a line of railway will connect Bella Coola with Fort George, another old fur-trading post, and the strategic centre of the north.

The history of our Pacific Hinterland is the history of the Hudson Bay Company and the other fur-trading companies and their Scotch employés, whose names, together with those of their Franco-Canadian half-breed servants, have been given to the principal features of the colony. Full accounts of these are to be found in all the recognised books on British Columbia.

In such out-of-the-way parts of the world, the different Powers neither encouraged nor interfered with private enterprise, and only intervened when different nationalities started "scrapping."

In the north, Russian merchants in 1796 banded themselves into a strong monopolistic company, and very much extended the work of those who had followed Behring.

Ten years later American fur traders appeared in the south. One of these, Astor, formulated the project of consolidating the American trading companies into one powerful concern like those of Canada, and like them, tolerating no competitors. This is the origin of all the trusts in America. Astor "started in": at the same

time he tried to obtain from the different legislatures laws preventing Canadians operating beyond their frontier, which was then undefined.

The field of American enterprise, starting from the east, went far west of the settled territories, and on the Pacific they did not worry whether they were in English or Spanish spheres.

Astor floated the Pacific Fur Company in 1810, and in 1811 he built the first American post on the Pacific coast, Astoria. He dreamed of creating a great town and a great seaport, and incidentally of making money out of selling real estate—just the game that is being played to-day all over the newer world, boom towns started by plucky speculators. One of the Canadian fur-trading companies did its best to forestall Astor, and sent David Thompson, one of Simon Fraser's lieutenants, down the Columbia River, and but for a mutiny of his men, Thompson would have probably carried out his instructions, and given England a far larger extent of the Pacific littoral than she has to-day.

When in 1812 war broke out between the United States and Great Britain, the North-West Fur Trading Company seized Astoria and held it until 1818. At the conclusion of peace the fort was given back to Astor's company.

In 1825 the Hudson Bay Company established their headquarters at Fort Vancouver on the Columbia River, which as a commercial centre has been since entirely eclipsed by Portland (Ore.). By 1843 the Americans had become so thoroughly aggressive that the Hudson Bay Company prepared to abandon Fort Vancouver (now the little town of Vancouver in the State of

Washington) and transferred their headquarters to Fort Victoria (now the capital of British Columbia), at the south end of Vancouver Island, which they held under charter from the Crown for a colonising enterprise.

Victoria as a trading station became steadily more valuable, and gained virtually the whole distributing trade of the North Pacific coast, but the colonisation scheme of the Hudson Bay Company was only a piece of bluff, for they had no intention of allowing settlers to drive away the game, and thus render more difficult the task of obtaining the furs which formed the greater part of their revenue, and had to be drawn from the forest as the sea-otter had been virtually exterminated.

The Americans, who have always been adepts at "twisting the lion's tail," made an attempt to claim the whole of the Pacific littoral from California (then a Mexican possession) to the southern boundary of the Russian sphere (which they subsequently in 1867 purchased). They embodied their pretentious claims under the short and striking formula of the four F's —"Fifty-four, forty or fight." The President of the United States on his election declared that the rights of Americans over the debated ground were clear and indisputable. To prepare for every eventuality, the British Government sent a fleet round to the waters of Vancouver Island. Although the British Government were prepared to stand no nonsense from the Yanks on the Pacific coast, they gave way largely on account of a report from a naval officer, that New Caledonia, as our colony on the mainland was then called, was largely a "sea of mountains." His letter to his brother

in the Cabinet carried great weight at home, but his report was largely due to his being disgusted because the salmon would not rise to the fly in the Columbia River, and to the fact that he had seen nothing of the Pacific seaboard beyond the Coast Range. After this naval expedition came the treaty of June, 1846. The result of this compromise was that the forty-ninth parallel was adopted as the International Boundary in the south ; the Hudson Bay Company lost twelve out of the twenty-two posts it possessed ; the island of Vancouver remained a British possession.

After the Anglo-American treaty of 1846, the Hudson Bay Company established several posts on Vancouver Island, and secured for a short period the same commercial and administrative monopoly as it had in New Caledonia (as British Columbia was then called) and the rest of undeveloped Canada.

With the exception of the importation of a few coal miners, the attempts at colonisation were not a success, until the discovery of gold in the northern interior in 1857, and although only some four millions sterling had been won from the alluvial fields by the end of 1865, the influx of population gave the colony the start it needed. New Caledonia was proclaimed a Crown colony, and the seat of government was fixed at Queenborough, now New Westminster, on the mouth of the Fraser River.

In 1866 the colonies of Vancouver Island and New Caledonia were amalgamated under the title of British Columbia, and it was decided to fix the capital at Victoria, although several of the Government offices for a time remained at New Westminster.

In 1871 British Columbia entered the confederation

of the Dominion of Canada, on the understanding that it should be linked with the east by a trans-continental line. Such was the origin of the Canadian Pacific Railway.

Years elapsed before the Canadian Pacific project matured. The British Government gave no help whatever, thanks to the unfortunate report of Captain Palliser. In 1876 it was all Lord Dufferin (then Governor-General of Canada) could do to stop the colony breaking away from the Dominion and declaring itself independent. With virtually no markets, this out-post of Empire struggled hard to live. One or two enterprising men got the timber business started, but the markets of the world were hard to acquire, and slow progress was made. The Government were often in the direst straits to get ready cash to carry on the public service, and anyone who was making money could get as much of the Province's resources as he wanted for a mere song. One saw-mill owner was offered 30,000 acres of the finest timber on Vancouver Island for £2,500, timber which to-day will cut up into £60,000,000 worth of lumber. He could not see it, and refused his chance.

Coal could be sold down south, and the growing town of San Francisco could take all the coal British Columbia could supply. But the coal-mine owners were slow. A miner named Robert Dunsmuir, finding a coal seam which he staked, left his job and commenced in a very small way with a waggon and cart, mining the coal himself. The admiral of the Pacific station and two of the officers financed him, and gave him the contract for the Navy. Getting ahead, he soon made himself the power

of the coast coal market. He bought his partners out, and as the only man in the country making money, everyone turned to him for leadership and guidance. The Victoria people wanted a railway connection with the coal city of Nanaimo, and the Government asked Dunsmuir to help them in this project. He undertook to find the Government £150,000, which they should give him to build the railway. He also demanded that "to pay for the whistle," two million acres of the finest timber land, together with the coal rights underneath it, and all rights other than gold, silver and gems, should be given and free of all taxation.

Just before the granting of the Dunsmuir concession, the third attempt to finance the Canadian Pacific was made, and Sir Sandford Fleming came through the Yellow Head Pass, and thence by Bute Inlet and across the Seymour Narrows, the idea being that Esquimalt, the harbour adjoining Victoria, should be the Pacific terminus. Further surveys led to a more southerly route being decided on, and the Dominion Government, who were helping the Canadian Pacific Railway project all they could, built from Port Moody, a little village at the head of Burrard Inlet, the first 200 miles of the railway eastward to join up with the contractors coming from the prairie. The route near the sea undoubtedly was a bad one ; it should have been built from a point on Burrard Inlet, through New Westminster, and then follow the Fraser to Haney. Subsequently the Canadian Pacific Railway acquired 26,000 acres of land nearer the sea than Port Moody, and put the town-site of Granville on the market, and Granville should be the name of Vancouver to-day. Lots, some

of which have since changed hands for £130,000, could then be bought for £20, no one believing in its future. For years the coast knew it by the name of Gas Town, after a talkative publican whom Earl Grey described as " that inspired booster Gassy Jack."

The Canadian Pacific Railway was completed from coast to coast in November, 1885. Dunsmuir's little railway (the Esquimalt and Nanaimo Railway) was completed a year later. Dunsmuir, had he had his way, would have got still further concessions from the Government, and have built up to the Seymour Narrows, and thence from the head of Bute Inlet to the Yellow Head Pass. This idea (the colonisation railway scheme of Dunsmuir) would have matured had he been given what he asked for, and Vancouver Island would have been directly connected with the prairie. It is this railway that everyone on the coast is working to get constructed now. Sir Sandford Fleming in his original report said that the time would arrive when a railway would have to be constructed *at whatever cost* to the outer ports of Vancouver Island. On the coast it is felt by all, that, with the great development of the prairie and the opening of the Panama Canal, the time has arrived to commence constructing the Bute Inlet and Yellow Head Pass Railway, and that this project is now necessary as well as economically sound.

CHAPTER II

GEOGRAPHY AND CLIMATE

The Pacific coast from California to Alaska is geographically one. Separating it from the level prairie is the well-defined chain of the Rocky Mountains. Fringing the sea-board are ill-defined groups of mountains, which are known as the Cascades or Coast Range, and in California as the Sierra Nevada. Between the Rockies and Cascades, minor ranges, isolated plateaux, and deep valleys break into the country, which otherwise is generally level. In the south the country is a desert. This desert, changing from an arid plain in California to rolling hills of bunch grass in Washington, continues into British Columbia, about 250 miles beyond the boundary between Canada and the United States. Then open forest country is reached, which extends about as far as the fifty-sixth parallel, beyond which are the tundras and the stunted timber of the Great Barren Northland.

The Coast Range, both in the south and north (territory of the United States), falls precipitously into ocean depths when it reaches the sea. Between Cape Spencer in Southern Alaska and Cape Flattery, the most northerly point of the State of Washington, is a great submerged plateau of 200,000 square miles in area, of which 130,000 are shallow banks and 70,000

consist of a series of islands, which may be roughly divided into Vancouver Island, the Queen Charlotte Archipelago and the Chain of Islands. The Chain of Islands are small at their southern end, and increase gradually in size up to Cape Spencer.

The Japanese Current, which corresponds to our Gulf Stream, impinges on the western edge of this submerged plateau and follows the line of its submerged escarpment to the Alaskan coast. The effect of this warm stream is to render the actual coastal belt of the North Pacific very much the same in climate throughout. Its in-shore waters (the sea of the submerged plateau) are themselves quite cold, due to ice-cold streams and glacial rivers coming out from the various fjords along the coast line. So marked is the difference between the in-shore waters and the ocean that, as one steams out of the shallows, one ceases to see the surface of the water, for a great white blanket of steam, 3 or 4 feet thick, covers the sea. Roughly, two-thirds of this submerged plateau lies in the English sphere.

The Queen Charlotte Archipelago, just south of Dixon Entrance (the north of Dixon Entrance is the international boundary as far as the Portland Canal), is situated on the north-west edge of this plateau. Vancouver Island (150 miles to the south of the Queen Charlottes) hugs the shore of the mainland, and has been connected with it at no very distant date, as its fauna and flora prove.

On the west coast of Vancouver Island the escarpment of this submerged plateau is forty to twenty-five miles away from the coast line.

The commercial development of British Columbia

is due entirely to this submerged plateau, for European enterprise came to this part of the Pacific coast to trade the skins of the sea-otter, with the result that this animal has been entirely exterminated. The sea-otter lived on the halibut and herring with which this plateau abounds.

The various islands that are in the shallow sea one may describe as the mountain tops of this submerged plateau. In the main all these islands are a group of igneous rocks, of which part of the Queen Charlottes and the whole of Vancouver Island have been overlaid by sedimentary deposits of the secondary and tertiary ages with recent volcanic intrusions. The whole has been worn down by glacial action, so that in one place extensive gravel moraines, in another beds of boulder clay, are to be found, while in a third a regular series of late sandstones alternate with barren cliffs of trap. Upon such unpromising surface generations and generations of fir trees have flourished and, by their decay, have gradually created sufficient mould to provide suitable ground for other forms of vegetation, until the country has become covered with a dense growth of timber, according to its situation and adaptability to the wants of each particular kind.

During six months of the year, from May to October, the Pacific Ocean in these latitudes is as calm as a mill pond; but, during the winter months, from October to May, the prevailing north-westerly wind is replaced by breezes, which from time to time develop into violent gales blowing with a great velocity, ninety miles an hour having been registered at the



Photo by courtesy of Can. Pac. Ry.

STANDING TIMBER ON VANCOUVER ISLAND

Government Station at Triangle Island. These winds are not dangerous in the Pacific itself, but they are of great danger once the banks are reached, so much so that vessels have turned turtle in the shallow water, and the local Indians, when voyaging down the west coast of Vancouver Island, always put right out to sea to avoid the breakers in-shore. Off the west coast of Vancouver Island, where it is sheltered by the peninsula of which Cape Flattery forms the northern point, and the inside passage east of the Chain of Islands, with the exception of the gap of Mill Bank Sound, the sea is almost invariably calm ; and it is more or less calm in the Hecate Straits, that part of the banks which is between the Queen Charlottes and the mainland.

The whole of this coastal belt is jagged by a series of fjords. These fjords are known by the names of sounds, inlets, and arms, and those which are exceptionally long and narrow as canals. At the heads of these fjords enter small rivers and mountain torrents. In each there is the marked separation between the salt and fresh water ; a few have little deltas at their heads, which may have some value for settlement purposes, and in some of them there are small lakes in which the sea runs in and out, sometimes at each tide, sometimes at long intervals, either with a gentle flow or like a mill-race. The greater part of these fjords are deep, and those that have not too many islands in them offer good anchorages. Frequently they are deeper than the submarine plateau that borders the coast, being very similar to those of Scotland and Norway. One might describe them as a series of ancient lakes which have disappeared under the waves

without losing their form. Their general trend is mostly north-east and south-west.

Following the western coastline of Vancouver Island, before quitting the shelter of Cape Flattery, are two small fjords, Sooke and Port Renfrew; then comes Barclay Sound, which terminates in the Alberni Canal, cutting Vancouver Island three parts into two. The town of Alberni at the head of the canal is one of the terminals of the island railway systems—as a logging port it is of some value, but it is of no commercial advantage, as there is fog always at the mouth of Barclay Sound. Between Barclay Sound and Nootka are a whole series of fjords, one of which, Clayoquot, may become a fishing centre. Nootka Sound consists of three arms, into one of which the now constructing island railway systems will be located. There are roughly a dozen sounds between Nootka and Quatsino. Quatsino Sound at its mouth is three to four miles wide, and runs across the island within eight miles of the east coast (Hardy Bay). It has three arms, one of them over thirty miles long. Some point in Quatsino Sound (possibly Winter Harbour at its mouth) will become a point of some strategic importance as the terminus of the island railway systems, and the port of departure and arrival of vessels trading to Japan, China and Siberia. North of the island is Cape Scott, a promontory four miles long, which is used by the local fishermen. Beyond Cape Scott are two islands and an infinite number of islets and bare rocks where fishing eagles live. The most northerly of these is Triangle Island, on which the Government maintain a lighthouse and meteorological station.

Following the east coast of Vancouver Island southwards is Sushartie Bay, then Hardy Bay, which is only eight miles from the nearest point on Quatsino Sound, and which possibly may become one of the terminals of the island railway systems and the "jumping off" ground for the north. Then seventy miles without a possible port, until Elk Bay, just north of the Seymour Narrows, is reached. Here it will be possible to connect by ferry with the head of Bute Inlet. A few miles south are the famous Seymour Narrows, which the inhabitants of Vancouver Island are so keen on having bridged. Just south of the Narrows are two little bays, Menzies and Duncan Bays, the former an impossible harbour on account of a big sand-bank in the middle of it. Duncan Bay is one of the ports of the now constructing island railway systems. Thirty miles south is Comox, three miles by road or water from Courtney, the principal town of the fine agricultural valley of the Tsolum River. Comox has a good harbour sheltered by a long sandspit, which is used by the Navy as a rifle range. Halfway between here and Nanaimo is Deep Bay, a possible small port. Nanoose Bay, just north of Nanaimo, is the point where the Canadian Pacific Railway have a connection with Vancouver. Nanaimo, the coal city, has a good harbour. Ladysmith and Chemainus to the south are both logging and coal ports. South again is the Sannich Arm, cutting into the island about twenty-five miles, and being the western boundary of the Sannich peninsula. Sidney, on the east of the Sannich peninsula, is the port of a small railway connecting with Victoria. At the southern extremity of

the island are the inner and outer harbours of Victoria and the great Bay of Esquimalt, which is the Canadian naval station of the Pacific Coast. Many of these ports are at present of no consequence at all, but they will all become points of some importance as mines open up and the fisheries develop, and as the timber industry gets worked on a true economic basis, for the mills must go out of the great cities and into the heart of the timber country on Vancouver Island, on which is to be found three-quarters of the timber wealth of British Columbia. (*See* Map IV.)

Following the coast of the mainland upwards from the International Boundary, we have Burrard Inlet, the terminus of Canada's first trans-continental system, the Canadian Pacific Railway. Just south of Burrard Inlet is the mouth of the Fraser, a great river navigable for ocean-going vessels twenty miles from its mouth, and for small steamers for over 100 miles inland. Howe Sound, just north of Burrard Inlet, is the port of the northern interior. The fjords beyond Howe Sound have no importance except for pulp and timber mills, until Bute Inlet, opposite the Seymour Narrows, is reached. Here is Waddington Harbour, which some day may be a terminus. If, however, a railway connects by ferry with Elk Bay, the route followed may be the north shore of the inlet and through the Estaro Pass to Frederick Arm. Burke Channel, at the head of which is Bella Coola, has about 60,000 acres of good land along the valley at its head and a Danish settlement of some importance. Contrary to the usual conditions on the coastal belt, much of this valley is covered with deciduous trees—birch, hazel and alder.

Bella Coola may possibly become one of the mainland ports of Canada. The Douglas Channel, into which the Kitimat flows, has 50,000 acres of good land at its head, and may become a point of some strategic importance if connected up with the Grand Trunk Pacific system, a distance of thirty miles. The mouth of the Skeena has one or two small ports on it of no value. The Skeena itself is navigable for river steamers up to Hazelton, 125 miles inland. Kaien Island, now Prince Rupert, is the terminus of the Grand Trunk Pacific Railway system, and a future city of great importance. South of Kaien Island is a small harbour called Porpoise Harbour, in which are 1,100 acres of flat land suitable for a town-site (Prince Edward). Port Simpson, twenty-five miles north of Rupert, is an old-established settlement. As a harbour it has not much value until the reef which shelters the port has a breakwater built on it. It can be connected with the Grand Trunk Pacific system by following the western shore of Work Inlet, and tunnelling through to their main line.

Beyond Port Simpson it will be necessary at some time to build a railway up the Naas Valley. This cannot be done from its mouth as the entrance is very bad; Iceberg Bay, a harbour twelve miles south-west of the mouth of the Naas, has been suggested as a possible terminus.

I discuss the possibilities of the Portland Canal and Observatory Inlet in another chapter.

On the mainland and on the Chain of Islands there are several small bays, which can be used as fishing harbours and as nuclei for fishing settlements. On the Queen Charlottes there are several harbours, but only

two worth considering at present, Masset on the north of Graham Island, and Skidgate, the headquarters of the British Columbian fisheries.

With the exception of a small portion of the basin of the Columbia River, from a point of commercial geography, the interior of British Columbia is the basin of the Fraser. The Canadian Pacific Railway (main line) enters this valley thirty-five miles east of Salmon Arm, and follows the left bank of the Thompson River, roughly, 100 miles to its junction with the Fraser at Lytton, and thence the right bank of the Fraser for about 150 miles to its mouth. The first 100 miles of the Fraser from its mouth is through the rich valley of the Lower Fraser, and river steamers run on this part. Further up the river mountains form its banks, and here and there are benches, never more than three miles wide, the old flood plain of the river through which it has cut. At Lytton the Fraser and its great tributary, the Thompson, join.

Forty miles north of Lytton on the Fraser is the little town of Lilloet, and here the southern desert may be said to terminate, and the great northern interior begin.

Thirty-five miles north-west of Lytton is Ashcroft, from which the Cariboo Road turns northward to the strategic centre of northern British Columbia, Fort George, and from Ashcroft the Canadian Pacific Railway have surveyed a line northwards. One hundred and forty miles north of Ashcroft is Soda Creek on the Fraser, and from this point the Fraser and its tributaries, the Nechaco and Stuart Rivers, afford nearly 1,000 miles of navigable waterway.

Forty miles east of Ashcroft the North Thompson and South Thompson join. The Canadian Northern's trans-continental system, which from the mouth of the Fraser has paralleled the Canadian Pacific on the opposite bank, follows the North Thompson to its source, and then to Tête Jaune Cache, forty miles west of the Yellow Head Pass, through which the Grand Trunk and Canadian Northern railway systems connect up with the prairie.

From Tête Jaune Cache the Grand Trunk Pacific Railway follows the left bank of the Upper Fraser for 170 miles north-west. It crosses the Fraser at Fort George, just south of its two great arms, the Nechaco and the Upper Fraser. Fort George is being connected with Vancouver by a subsidiary company of the Grand Trunk Pacific, called the Pacific Great Eastern Railway, which runs beside the Fraser and at distances varying from sixty miles from it. From Fort George the Grand Trunk keeps to the valley of the Nechaco and its tributary, the Endiako. It climbs the Babine Range into the Bulkley Valley. Seventy miles further on, it reaches the Skeena River at Hazelton, the head of steamboat navigation. The Grand Trunk then follows the Skeena through the mountains to its Pacific terminus at Rupert.

The Fraser basin, twenty miles north of the Canadian Pacific Railway main line, is described as the northern interior of the province of British Columbia. Beyond this northern interior, which should include some of the Peace River tributaries, are the basins of the Naas and the Stickine, and some of the basin of the Liard. The Naas, such of it as is level near its mouth, is

typically the country of the coastal belt, dense forest. Some of the southern tributaries of the Peace River have all the characteristic features of the northern interior; otherwise the whole country north of the Fraser basin is beyond the limit of cultivation and a part of the great barren northland.

The following subjoined rough figures give the drainage basins of the great rivers of British Columbia :—

River.	Area drained.	Remarks.
Naas .	7,000 square miles.	Area largely mountains.
Skeena .	20,000 „ „	„ „ „
Columbia .	45,000 „ „	Area lakes, mountains and desert.
Fraser .	150,000 „ „	Area largely level and capable of settlement.

The Columbia basin has acquired some importance on account of the development of its mineral resources in the Kootenays, the charm of its lakes and scenery, and the extension of the branch lines of the Canadian Pacific Railway. These are fully described in the handbooks of the Canadian Pacific Railway Company.

The Rockies and the Cascades each have a width at their bases of sixty to one hundred miles. On the British Columbian side of the Rockies there is a smaller and older range, the Selkirks, which parallel the Rockies and run in the same direction. They terminate, with breaks in between, in the Cariboo Range, which ends up in the watershed of the tributaries of



Photo by courtesy of Grand Trunk Ry.

NEARING RUPERT. THE SKEENA RIVER

the Peace and Fraser. Minor and isolated ranges occur, such as the low Gold Range in the south, the Babine Range east of Hazelton, the Atna, Firepan and Ominica Mountains on the great watershed, and the Cassiar Mountains in the barren northland beyond.

The triangle of land bordered by the 120th meridian north of the Rockies, the 60th parallel westward to the foot of the Rockies, and following the western slope of the Rockies to the Yellow Head Pass, belongs geographically to the prairie provinces of Canada, and is too far ahead of developments to describe.

The prevailing wind in British Columbia is a warm north-west wind, full of moisture as it leaves the Japanese Current. Thus we have heavy rainfall on the Queen Charlottes, on the Chain of Islands and the west coast of Vancouver Island, whose whole central range deprives these winds of their moisture, giving its east coast and the fringe of mainland opposite a rainfall about equal to that of England. The Cascades (Coast Range) catch the rest of the moisture in the wind, thus leaving the whole of the interior virtually dry. The prevailing winds turn to gales in winter. Warm and dry, they blow across the interior, and are known as the Chinook Winds. Thus the winter, which otherwise would be as rigorous as Siberia, is tempered, and, rightly, British Columbia claims her climate as one of her priceless assets.

CHAPTER III

THE GREAT CARRYING COMPANIES OF CANADA AND THEIR PACIFIC PORTS

THE development of the Pacific Coast is so intimately bound up with the railway lines that connect it with its natural hinterland the prairie, that any book on British Columbia must necessarily embrace the Canadian transcontinental railways. Unlike the United States, with its hundred and one different lines of railway run by the "railway kings" of New York, and no complete transcontinental system, Canada has only three railways, all of which before the end of 1914 will run across the Continent.

A glance at the map will show that three-quarters of the great grain-growing area of the prairie provinces of Western Canada become directly tributable to British Columbian ports the moment the Panama Canal is through. Already the British Columbian seaboard has far more shipping than the Atlantic seaboard of Canada. The actual increase of shipping for carrying off grain *viâ* the Panama Canal to Europe will mean an additional 500 ships a year on the present figures. What it will be in the future is hard to forecast. There is a great and growing wheat trade with South America and Australasia. Already Japan and China are giving up rice and taking to bread, and should shops be established throughout the Chinese Empire to

sell flour and bread at cost, no one would be able to put a limit to the amount of grain that could be produced and sold from the prairie. On the present figures of the world's consumption of wheat, the prairie can more than double its production without seriously lowering the price of wheat. The production of the prairie in the last five years has increased 300 per cent., and it is a safe estimate to say that it will increase another 300 per cent. in the next five years. This increase will be wanted for export, as well as for supplying the needs of its growing cities and the United States, which are ceasing to be a wheat-producing country.

In the large map attached I have drawn an arbitrary line. West of this line is the area that I consider will be tributary to the Pacific Coast ports. On a basis of exact figures, this line should be a north and south line through a point which would be slightly nearer the Pacific than the exact halfway point between Vancouver and Fort William (one of the shipping ports on the Great Lakes). Other considerations to determine this point rule. These are points on the great railways that are the important junctions and have large yardage for trucks. In the case of the Canadian Pacific this point is Moosejaw, and in the case of the Grand Trunk and Canadian Northern it is evidently Saskatoon or near by.

After the Canadian Pacific Railway had been completed in 1885, the able men who by the greatest effort got the enterprise through, more or less went to sleep, and it was left to a young firm of contractors to wake them up and make the Canadian Pacific Railway the

aggressive and well-managed corporation it is to-day. History in any book is naturally more or less the fiction that is agreed upon, because it is against men's better judgment to tell of things as they are until everything is in working order and until the mistakes and crimes of the past have been justified by successes. The story of the awakening of the Canadian Pacific is the story of the career of Mackenzie and Mann, and the birth and upbringing of their child, the Canadian Northern Railway.

There were so many avalanches continually coming down the mountain sections of the Canadian Pacific Railway that the directors decided to protect a great deal of the route by snowsheds. A young contractor named Donald Mann, and an accountant in the employ of the Canadian Pacific Railway named William Mackenzie, put their heads together and tendered for the erection of these many miles of snowsheds. Amongst the many tenders, theirs was by far the lowest. With some hesitation the directors of the Canadian Pacific Railway gave Mackenzie and Mann the contract. They did the work well, and came out well ahead of the game. In 1896 they purchased a charter for a small railway in Manitoba, and with great difficulty financed its building. Then they built another little piece of railway helped by the Manitoba Government giving a guarantee for their bonds. They bought a small line running into one of the ports on the Great Lakes, and from it they ran four little feeders into the prairie. Their successes enabled them to consolidate their bits of railway into one, under the title of the Canadian Northern.

The prairies were now looking up. The Canadian Pacific Railway, finding that Mackenzie and Mann were making money in freighting grain, and that Jim Hill, the " king " of the North Pacific Railway in the United States, was starting to build into Canada, woke up and commenced building branch lines as feeders to their main line system. The activity of the Canadian Northern and the Canadian Pacific in covering the prairie with a network of railways had a far-reaching political effect. The American railway kings saw that they would be unable to compete with honest and efficiently managed railways, and in 1900 the North Pacific handed over the 350 miles it had built into Canada to the Mackenzie and Mann interests.

The Grand Trunk is by far the oldest railway in Canada, but prior to the development of the prairie, it had fallen on evil days. As the Canadian Pacific had been built largely owing to the efforts of the former Conservative Government, the late Liberal Government under Laurier conceived a scheme of assisting to better the connection between eastern Canada and the prairie. London financiers put life into the old Grand Trunk Railway, planned the National Trans-continental, and carried the system westwards under the title of the Grand Trunk Pacific. The whole history of the Grand Trunk and its extension, the Grand Trunk Pacific, is well told in Mr. Talbot's " The Making of a Great Canadian Railway."

Before the end of 1914 Canada will have three completed trans-continental railway systems, with feeders throughout the prairie :—

Railway.	Mileage across Canada.	Pacific Port.
Canadian Pacific . . .	3,658 miles.	Vancouver.
Grand Trunk Pacific . .	3,556 „	Rupert.
Canadian Northern . .	—	Port Mann.

Some rough details of the western sections of the three great systems are of interest.

At Medicine Hat, in Saskatchewan, the Canadian Pacific Railway main line divides into two forks. The northern one, the original route, goes *viâ* Calgary and through passes in the Rockies and the Selkirks. It is a route more for passengers than for freight with high gradients in British Columbia, and traverses country much of which is useless once the prairie is left. Their southern route from Medicine Hat, passing the coal towns of Macleod and Lethbridge on the prairie, traverses a far better country in British Columbia. It goes through several mining towns of importance, the southern shores of the Kootenay Lakes, the lower Arrow Lake, the Kettle and Okanagan Valleys, and joins up with the main line near the head of the steamboat navigation on the Fraser. This route will have been completed before the end of this year. The Canadian Pacific Railway claim that it will be a better route in every way, and that their gradients will be reduced to 1½ per cent.

The route of the Grand Trunk Pacific through the prairie is one-third longer than the Canadian Pacific Railway, and the country through which it runs has a greater rainfall, but otherwise is typically the same country from an agricultural point of view as that over

which the Canadian Pacific Railway runs. Its entrance into British Columbia is through the best pass in the Rockies, the Yellow Head, 3,700 feet above sea-level. So valuable is this pass that the Canadian Northern are running through it, and the Canadian Pacific Railway as well have projected a line from Revelstoke on their main line in British Columbia to connect up, through the Yellow Head, with their branches in Alberta. In British Columbia the Grand Trunk are prohibited by the Provincial Government from constructing branch lines, under their own name, until their main line is completed. It is, therefore, impossible at present to indicate their prospective development in British Columbia. One may take it definitely that Rupert will be their terminus, Prince Edward will be a suburb of some importance, and that fan-like arms will be run to the mouth of the Kitimat and the old Hudson Bay post of Port Simpson.

The Canadian Northern system follows a longer and even a better line of country on the prairie than either the Grand Trunk or the Canadian Pacific Railway. It, too, runs through the Yellow Head Pass at the same altitude as the Grand Trunk Pacific. To secure freights it takes the shortest and most feasible route to its terminus, Port Mann, at the mouth of the Fraser, opposite the old capital of New Westminster, and then runs into Vancouver, which no railway can afford to ignore.

Of Vancouver's future there can be no question. There are now already five trans-continental railways built and building into it. It is already the commercial centre of British Columbia, and its trade with South

America, Australasia and Europe (by way of the Panama Canal) must continue to grow. In time Vancouver proper, Hastings, North Vancouver, Port Moody, and the other villages on the Burrard Inlet will be one vast city, and include Point Grey, South Vancouver, the fishing village of Steveston, the cities of Port Mann, New Westminster and Coquitlan, where the Canadian Pacific Railway are building their western railway works and their elevators for shipping the prairie wheat.

Victoria, the capital of British Columbia, claims that it is the terminus of the Canadian Pacific Railway, and, to some extent, this is true, as it is at present the point of arrival and departure for all steamers leaving Vancouver on ocean voyages. Train ferries can be constructed and operated even cheaper than prairie railways, and, in consequence, if the Victoria merchants are enterprising enough, they can secure much of Vancouver's commerce. They are not going to secure this commerce on the untrue statement, which has, unfortunately, been published broadcast, that it is cheaper for vessels to load and discharge in Victoria on account of three shillings a ton being demanded for extra insurance for going into Vancouver.

I have put the above statement on record, as I have been asked to authoritatively contradict "this extra insurance lie," which is merely a real estate man's game, and the game of one Canadian town trying to knock another.

The day of Seattle, the southern apex of the triangle formed by the three great cities in Puget Sound, is gone, for Rupert will rob it of all its northern trade,



Photo by courtesy of Grand Trunk Ry.

RUPERT. THE TOWN AND HARBOUR

and Portland (Ore.) and Vancouver, better situated and more aggressive, will win from it the prairie wheat and the shipping to the ports of the Southern Hemisphere and Europe.

The future of Rupert is even better than any other coast town. Not only will the voyage to the Orient be shortened by 473 miles, but the time across Canada will be shortened too, as the Grand Trunk Railway throughout most of its length has a grade of four-tenths of one per cent., making it the best railway on the American Continent, with the possible exception of the Pennsylvanian road in the United States. Rupert's position gives it the certainty of gaining the whole distributing trade of Alaska—a trade at present held by Seattle. The development of the northern fisheries has been already foreseen, and Rupert has one of the largest (if not the largest) cold storage plant in the world. The country surrounding Rupert, which is rugged and mountainous, does not lend itself to the growth of a great city, and the town-site is only laid out to house 72,000 people. That it will house this number of people is unlikely, for Rupert is destined to become a city of warehouses, the residents living on Digby Island, across the fairway, and at Prince Edward, on Porpoise Harbour, eight miles back on the Grand Trunk Pacific before Rupert is reached.

Another trans-continental terminus north of Rupert has been suggested, and this will either be Iceberg Bay or the head of the Portland Canal. The head of the Portland Canal is the most likely, on account of its being a mining centre, as well as a good harbour, and it has the next chapter devoted to it entirely.

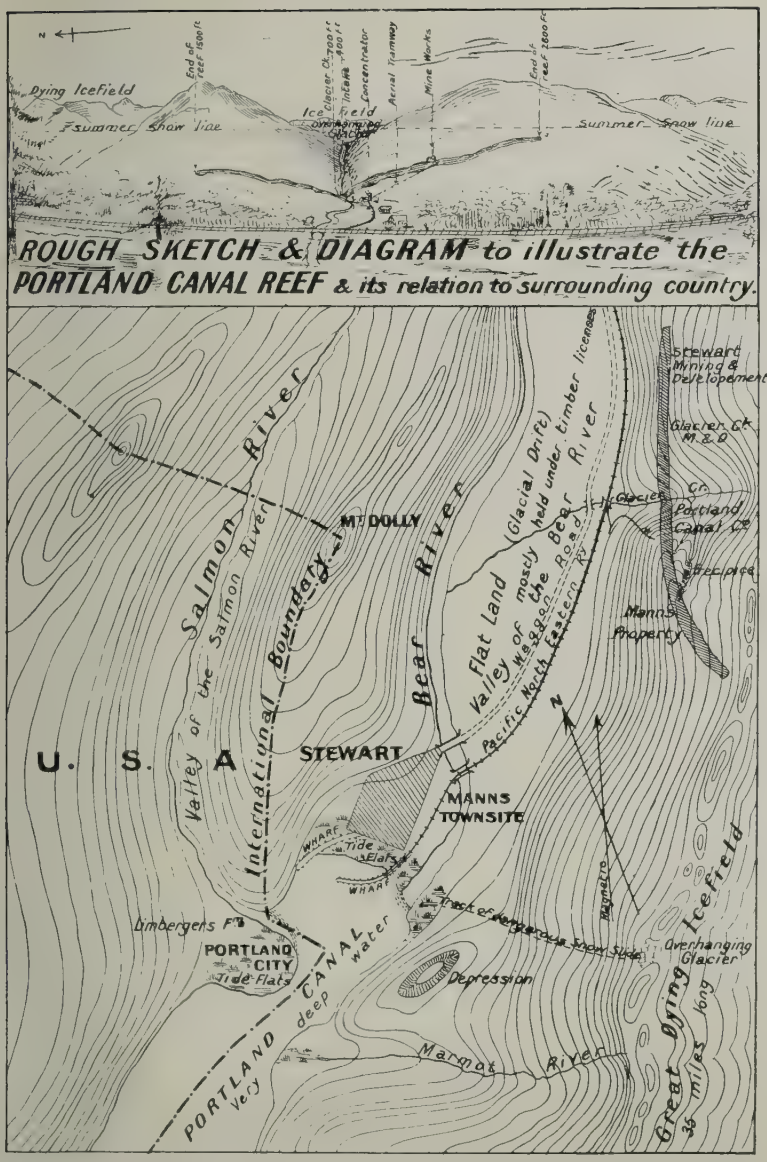
CHAPTER IV

STEWART, THE PORTLAND CANAL DISTRICT, AND ITS MINES

Of the possible future trans-continental terminals of the Pacific Coast, Stewart, at the head of the Portland Canal, is one of the most interesting. The British public has already heard something of it, as three years ago some of the inferior London papers published an account of the discovery of " A Mountain of Gold " in its vicinity. The enforced contradiction of this plausible journalistic myth undoubtedly did the future of Stewart a lot of harm, and yet, within four miles of the sea and right on the present line of railway (Canadian North-Eastern), is a reef from which, *up to water-level* (taking water-level as the foot of the mountains), can be won 400 million pounds sterling in gold, an equal amount of silver, and over 100 million tons of lead.

This marvellous fissure vein and the hundred and one smaller properties near by, together with the possibility of its being a trans-continental terminus, give Stewart the chance of becoming something more than a Johannesburg and a Vancouver rolled into one. The future, however, will largely depend on the intentions of the London syndicate at the back of the Canadian Northern Railway.

The story of the camp is worth telling. At the time



J. B. Thornhill, 25. *vii.* 1911

HEAD OF PORTLAND CANAL

A Fiord a Mile wide and 60 Miles long

the gold fever of Alaska was at its height—some sixteen years ago—a Yank came to Seattle with a yarn of "placer" (alluvial gold) in an inlet up the coast. He persuaded over sixty people to charter a steamer, and charged them £5 a head in addition to the passage-money to take them to his "find." When they arrived there he could not show them the gold, and he had the good fortune to get away on the departing ship before they could find a rope to hang him with. One or two of the party—the men who had women with them—sat down at the head of the Portland Canal, and the rest wandered over the mountain range to the east of Bear River, across the great dying ice field, down the further mountain range into the Naas River valley, in the hope of finding something. After great privations and hardships, they struggled down south, damning the country and their deceiver.

At that time the International Boundary between northern British Columbia and the panhandle of southern Alaska had not been run, and those wanting to get hold of real estate could not do so, because they did not know whether they were in Yankee or Canadian territory, so they resigned themselves to circumstances, and sat down and waited till they knew something. These few settlers at the head of the Portland Canal had a rough time of it for some ten years, earning money by various and devious means, playing round and prospecting, and trying to interest capital for the different mineral propositions they had found. Everything could only be handled by the big man, and little or no good was done until Dicie got a firm of brokers

to underwrite the flotation of the Portland Canal Mine. Then Stewart moved.

To-day—or rather during the summer months—the Grand Trunk, the Canadian Pacific, and Messrs. Evans, Coleman and Evans run palatial passenger steamers from Seattle to Skagway, all along the British Columbian and Alaskan coast. Thus Stewart, one of their ports of call, is only two nights at sea (a calm passage at all times, as the inside route, which is sheltered by the Chain of Islands, is followed) from Victoria and Vancouver, and twelve hours from Rupert. Some six hours' steam out from Rupert, there are sheltered by Pearse Island two gaps in the mountains of the Coast Range. One of these is Observatory Inlet, with Hastings and Alice Arms at its head. The other gap is the Portland Canal, the centre line of which forms the International Boundary as far as Portland City (U.S.A.), which consists of an hotel, a few stores on piles on the tide-flats at the mouth of Salmon River, and lies a mile south-west at the town-site of Stewart.

The canal itself is a waterway of nearly sixty miles long, through mountains 3,000 to 6,000 feet in height, with great overhanging glaciers of the dying ice field on the Canadian side. Throughout its length it averages a mile in width, and the depth is roughly 100 fathoms.

As one nears Stewart, the water becomes virtually fresh—a most important point to shipowners—for it means the barnacles are taken without having to dry-dock.

The small amount of acreage (roughly 800 acres) at

the head of the Portland Canal, which forms the harbour of Stewart, does not render Stewart impossible to develop as a harbour, as by digging into the mud-flats and using the glacial drift of Bear Valley for concrete, one could accommodate sixty of the largest ocean-going vessels, and still leave a sufficiency of room for the smaller coasting craft. A drawback that might prevent Stewart becoming the port of a trans-continental system is the overhanging glacier just south-east of the town, from which dangerous avalanches (snow-slides) from time to time descend. These, however, could be diverted by strong walls into a little lake in a hollow near by on the mountain side.

The only possible mineral field of any size, easy of access to the sea, is along or near the contact of the sedimentary rocks and the great granite batholith that forms the Coast Range of British Columbia and southern Alaska—a line of country almost entirely unprospected. Nowhere is this range pierced in such a way as to give easy access to a probable mineralised zone, except at the head of the Portland Canal and Observatory Inlet.

The geology of the Portland Canal district is easy to read. Standing in the town-site of Stewart, one can follow with one's eyes the contact between the green-stones and the granite. One can see how fissuring in the overlaying and recent shales has been worn down by ice action. If one goes into the field either in the Salmon Valley, most of which is in American territory, or up the Bear Valley, which is on the Canadian side, one can find in the mountain ranges vein after vein of lead-bearing iron pyrites in the slates or shales (or

argillites, as the geologists prefer to call them), in fissures running north and south, and bodies of copper-bearing iron pyrites along the various contacts running east and west.

All these discoveries, with the exception of two (on which serious development work has been done), are prospects with possibilities.

When my work in Stewart towards the end of the summer of 1911 was finished, I had a look round the district. Some of the things in the Salmon Valley impressed me very much. On one of the contacts I found an enormous body of gold-bearing copper ore, but as it was so very inaccessible, and the market for such things in Vancouver was decidedly bad, I did not " stake " it. I took a trip from Stewart by Sir Donald Mann's Railway (Canadian North-Eastern) up the Bear River Valley, and I saw the point where by half a mile of tunnelling it would be possible to get under the ice-fields through into the valley of the Naas River.

As the Canadian North-Eastern Railway is purely an individual enterprise, and does not have a guarantee from the Provincial Government or a subvention from the Dominion of Canada, its originator (Mann, of Mackenzie and Mann) can hardly be expected to make this tunnel unless he sees freights ahead. At present, the Naas Valley, which local people are boosting up, both from an agricultural and mining standpoint, is not accessible from its mouth, and getting into it from Stewart is always a matter of difficulty, and the crossing of the glacier with dog-teams in winter is more or less dangerous. Once the railway is into the Naas, the chance of connecting up with the prairie

is far greater, as there are the anthracite coal-fields at Kuldo on ahead, and from Kuldo to the prairie is less than 300 miles. Doing all this will mean that Stewart becomes the second Pacific terminus of the Canadian Northern trans-continental system.

But to get back to my subject. Before I left Stewart I visited the Portland Canal Mine and got the surprise of my life. I said nothing about it at the time, but tried to persuade people in London to buy the whole reef and consolidate it and go to work in a big way. As I failed to interest anybody, I have thought it best —although it may not be altogether wise to give such valuable knowledge away—to publish my information in my book.

At a point about two miles from Stewart, and about a mile and a half up the mountain side on the slope of the range that forms the east side of Bear Valley, an extensive series of fissures begin, which run about five and a half miles north, paralleling the direction of the range. This is the Portland Canal Reef. The width of this fissuring, where it has been uncovered, varies from 200 to 400 feet. This fissuring contains some of the original slate and veins of brecciated quartz and iron sulphides, which carry lead, gold and silver values. These mineral veins (which form a close, irregular, tangled network throughout the whole length of the reef) are from three feet to eleven feet wide, and the slate in contact with them is to so great an extent mineralised that it will probably be found economical to mine the two together.

Starting at the southern end of the reef (I shall through the rest of this chapter speak of this series of

fissures as " The Reef "), for half a mile is Sir Donald Mann's property. The highest point is about 2,800 feet, well below the summer snow-line. Walking on the mountain side as one nears the end of Mann's claims, one crosses the pathway made by snow-slides coming down from the ice field 2,000 feet above. These avalanches are turned off at right angles and fall precipitously to the north into a tributary of Glacier Creek. This part of the reef cannot be mined, except by approaching it either through Mann's claims or through the claims of the Portland Canal Mining Company, whose property begins at the northern end of the precipice, about a mile from the start of the reef.

Half a mile further on, the Portland Canal Mining Company have run three tunnels seventy feet apart into the mountain side, and have blocked out a section of nearly 2,000,000 cubic yards, only encountering one small horse in the reef. In this section blocked out, the amount of waste rock left behind in place was about two and a half times the amount mined. I shall, in my subsequent calculations, in order to be on the safe side, take the waste rock to mineral matter as three to one. At the point where the Portland Canal people were mining, they have an aerial tramway 8,000 feet in length connecting it with their concentrating plant a few feet up the mountain side, and just near where Glacier Creek comes out. The mine workings were at an altitude of 2,300 feet, and following the reef along, the country was falling about one to one and a half, with a final sharp drop to Glacier Creek, about 1,850 feet below, where the claims owned by the Portland Canal Mining Company ended. Then the reef climbed the hill

to the Stewart Mining Company's block of claims, about a mile and a half further on, where it terminated. Between the Portland Canal claims and the Stewart claims were the Glacier Creek Mining Company's claims, about three-quarters of a mile in length, and in the intervals between the three groups were broken claims and fractions of claims held by individual owners.

On my way down the mountain side from the Portland Canal Company's mine-head, I saw the reef exposed in two places. Here it was much easier to distinguish the mineral veins themselves, the mineralised portion of the slate and its non-mineralised portion. One of these mineral veins was eleven feet wide.

I could see that this reef was really one great fissure vein, and that if it could be worked economically, it offered a splendid chance for consolidation and a really good proposition to put up to London.

Elmendorf, the mine manager, very courteously gave me the assay values all along the reef, as well as other figures and the history of the various claims.

He told me that they were handling about 200 tons of ore a day, and concentrating it on tables worked by electricity generated in Glacier Creek (the whole of which waterpower they owned). This "feed" of 200 tons concentrated into eighty tons in the following proportions—waste 60 per cent., iron concentrates 36 per cent., lead concentrates 4 per cent. Of these eighty tons, seventy-two were iron concentrates, and eight tons lead concentrates. A trial shipment of 400 tons of concentrates to one of the Guggenheims' smelters down the coast (Tacoma, on Puget Sound, in

the State of Washington) gave recovery results as follows :—

Description.	Values won per Ton of Concentrates.		
	Gold.	Silver.	Lead.
Iron concentrates . .	7·2 dwt.	20 ounces.	—
Lead concentrates . .	8 „	5 „	900 lbs.

The value of the " feed " to the concentrator, which included both the ore in the veins and the ore in the mineralised slate, was worked out to be worth £2 to £2 10*s.* a ton; stooping was estimated to cost 8*s.* a ton and driving under £2 a ton; the cost of hauling, handling, concentrating and shipping 10*s.* a ton, and the cost of smelting 5*s.* a ton.

If these figures had worked out all right, the Portland Canal Mine would have won in net profits (going to work in the absurdly small way they were doing) over £15,000 a year. However, the actual working cost came considerably higher than was estimated, and the actual recovery was less satisfactory than that obtained from the trial shipment of 400 tons. The result was that the mine was being worked at an actual loss and was temporarily abandoned, and the Portland Canal Company's shares fell virtually to nothing, the shares of the other mining companies on the reef going the same way.

Subsequently a new company, called the Portland Canal Tunnels, was formed, and, although they have not adequate working capital, they are going to work in the right way, driving a tunnel at the foot of the

mountain into the reef. This tunnel, which will run virtually on water level, will be roughly three-quarters of a mile long before the reef is reached.

When this is done I hope London will take up the proposition, and go to work with "a big augur," running trains into the mine, and working the property with steam shovels as a quarry, building their own railway to the port of Stewart, having their own ships, their own coal mines, and a suitable smelting plant as near their coal mines and Stewart as possible.

Subjoined are two sketches and a rough summary of the details of the Portland Canal Reef :—

Length of ore body . . .	5½ miles.
Width of ore body . . .	200 feet and upwards.
Greatest depth proved by nature (This is where Glacier Creek cuts into the reef.)	1,850 feet.
Stratification	No evidence of ore body not continuing at depth.
Greatest depth covered by claims, assuming continuity of east wall.	3,000 feet approximately.
Greatest depth covered by claims, assuming continuity of west wall.	4,000 feet.
Proportion of "feed" to waste rock —gangue in place. (A very conservative estimate.)	1 to 3.
Iron in reef	30 per cent. in excess of silica.
Tonnage virtually in sight . .	1,000 million tons.
Values to be won to water level (*i.e.*, to foot of mountain).	Gold, £400,000,000. Silver, £400,000,000. Lead, 100 million tons.

A reader might well ask, "Has the Portland Canal district any similar ore bodies ?" and I feel inclined to answer authoritatively that *it is extremely unlikely*, although there are a hundred and one smaller

propositions in this country, which has been " shot to hell," some of which would pay investigation. These propositions would occupy too much space to describe in a book which is intended to be short and concise. However, one, in the adjoining canal, Observatory Inlet, needs special mention, as the Granby Company (a New York group who have done a considerable amount of mining in southern British Columbia) are developing a big low-grade copper property. This is known as " Hidden Creek."

Observatory Inlet parallels the lower portion of the Portland Canal on the east, and is connected with it by a passage north of Pearse Island. Its shore lines are more irregular than those of the Portland Canal, and towards its head it divides into two branches, known as the Hastings Arm and Alice Arm. At the junction of these two arms the Inlet is much wider, and contains several islands. One of these, Larcom, has a length of seven miles, another, Brooke Island, is three miles long. West of Larcom Island is Goose Bay, an irregular sheet of water three and a half miles in length and from half a mile to a mile wide. The principal known mineral deposits of Observatory Inlet are situated in this vicinity.

The scenery of the inlet is much the same as the scenery of the Portland Canal, and its geology is the same—the great granite batholith coming in contact with the older greenstones and their overlying slates.

The " Hidden Creek " property is about one and a half miles north of Goose Bay, near its outlet into Observatory Inlet. The Granby Company's claims are on the summit and sides of a hill, about two miles

from the Granby's wharf and port at Anyoux, in Goose Bay. They had, when I left British Columbia, roughly 400 men in their employ, and were putting up a smelter to treat 2,000 tons of ore a day. They had in sight 5 million tons of low-grade ore. averaging 2·3 per cent. copper (or 46 lbs. to the ton), and carrying small gold and silver values as well—the commercial value essentially depending on the copper content.

The certain success of the Granby Company's operations cannot fail to attract capital to the mines of the Portland Canal district, as well as lead to the prospecting of the contact between the granite and the silurian and triassic rocks that form the Coast (or Cascade) Range of British Columbia. And if my surmises are true, British Columbia, which is essentially the mineral province of Canada, should within the next few years receive great attention from the world of mining and finance.

CHAPTER V

GEOLOGY, MINING AND MINING LAWS

THE only interest that geology has for the average man is that from it he can decide the localities where different kinds of minerals can be found and the areas fit for agriculture, and on these lines I propose running roughly through the geology of British Columbia.

Development and the consequent creation of values in British Columbia have long preceded its scientific study. Rough geological surveys have been carried out, some by very able men, others by incompetents, and many by romancers. The information of explorers, prospectors and surveyors has been got together, and various attempts have been made to co-ordinate and compile the whole. Therefore, in any book on British Columbia, many misleading statements must necessarily occur. Monsieur Métin, in his very excellent book on British Columbia, makes some horrible blunders, and the average handbooks, whether turned out by the Dominion or Provincial Governments, as a rule deal with isolated pieces of country, and are very bewildering. In a country of which one-fifth may be said to be well known, two-fifths a little known, and the remaining two-fifths entirely unknown, a great deal of the geology is pure romance. However, there are certain main features which stand out.

The geological contacts between the various strata

do not at all coincide with the lines of relief. The oldest rocks, which are partly volcanic and partly sedimentary, are uncovered in the Selkirk Range, in the Valley of the Finlay, and again in the Klondyke. Among these rocks are intrusions of granite of an older date than the granite that forms the Coast Range. There are great bosses of these intrusions in southern British Columbia through all the rocks of the primary and secondary periods, as well as a few rare intrusions into rocks of the tertiary period, thus showing a series of intermittent volcanic activity extending over the whole geological era. In the vicinity of all these intrusions, either in fissures in the formations adjoining, or in contacts between the plutonic bosses and the surrounding formation, occur bodies of silver-lead and low-grade copper ores, the former carrying low gold values and the latter comparatively high gold values.

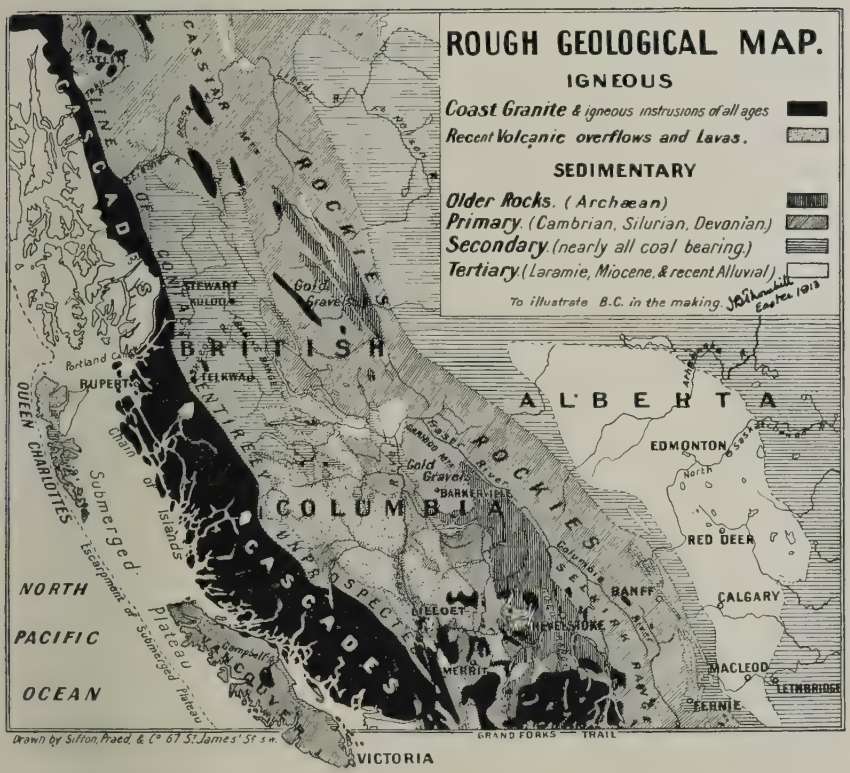
The Rockies are supposed to be entirely of the secondary period, but as there are overlying beds in them of the tertiary period, this generalisation will have to be modified. The Rockies evidently rose gradually as the strata adjusted itself after the Great Upheaval of the huge granite batholith which forms the Coast Range from Alaska to California. The Great Upheaval occurred in secondary times, and probably put an end to the continued catastrophes that are evidenced by the intrusions of granite bosses throughout all the earlier formations. After the Rockies rose and were denuded down more or less to their present form, there has been some minor volcanic activity resulting in folding and mountain building, the intrusions of more plutonic bodies, which, though

numerous, occupy far smaller areas than the plutonic intrusions of the primary and secondary periods. Flows of volcanic lava, which cover a great deal of the west coast of the Queen Charlottes, and a very considerable area of the northern interior, took place in comparatively recent times, and even so recently as to form the basis of Indian legends. Although these deposits cover large areas of country, they are of no great importance, as their thickness is often only a few feet.

The last great event, previous to the overflows of lava, in the geological history of the province was the glacial period, when the whole of the country west of the Rockies was covered by a great ice field, above which possibly projected only the highest mountain peaks. As this ice field died, it cut out great fjords, valleys, lake basins, and dug holes in the submarine plateau, as is evidenced by the deep water in the Straits or Gulf of Georgia. Remains of this great ice field are found in the glaciers in the Rockies and the Cascades, and the glaciers in the Central Range of Vancouver Island. The largest of these glaciers, a great dying ice field some thirty-five miles long and perhaps 3,000 feet deep, is found beyond the mountains which border the Portland Canal on the Canadian side.

British Columbia calls itself "The Mineral Province of Canada," and this is borne out by the present figures of production, which represent a greater value per head than any other part of Canada.

In the earlier days only alluvial gold and coal were worked, but now, owing to the influx of capital, there has been a small amount of reef mining. Certain



ROCK FORMATIONS OF BRITISH COLUMBIA AND ALBERTA

mining districts are more or less established. The country south of the Canadian Pacific Railway railway line, which I describe as the Boundary and Kootenay districts, is already well known in London. In the Boundary country there are the copper mines at Trail, Rossland, Greenwood, and Phœnix, which have a population all told of 10,000, and a tributary population of rather less. This is the low-grade copper district. North of the eastern end of this district is a very extensive silver lead field, of which Nelson, a mining town of 4,500, with a tributary population of 1,000, is the central mining point. Some of the mines in the west Kootenays are worthy of further investigation by English capitalists.

In the east Kootenays there are the mining towns of Cranbrook and Moyie, the latter the largest silver lead mine in Canada, while further to the east in the mountains is the celebrated Crow's Nest coal-field, the important mining town being Fernie, the other mining towns being in the great coal-field over the Alberta border. On the Canadian Pacific Railway main line there are the coal mines at Banff, and the mining distributing point of Revelstoke, from which the Columbia River is navigable for 200 miles northward. There have been reams written about this country, and detailed information is easy to obtain.

For free-milling quartz propositions, the district round Lilloet is likely to come into prominence very shortly, as the work being done on the different properties has given very satisfactory results, and as this district is only fifty miles from railway communications, there are no great obstacles in the way of development.

Some very good free-milling properties are in the Atlin district at the north-west corner of British Columbia, but as this district is so out of the way, and my first-hand information so small, I have to ignore it.

The future of mining, in my opinion, in British Columbia lies in the gold-bearing gravels of the Cariboo and in the Nation Lakes and Ominica district north of the Fraser watershed, the coal-fields north and south of the route of the Grand Trunk Pacific, between the head of the Buckley Valley and half-way between Hazelton and Rupert, and along the contact between the granites of the Coast Range and the sedimentary formations. This latter line of country, 1,000 miles long, is entirely unprospected, except in the two places where it is cut into by two arms of the sea, and the discoveries which I have previously described in the chapter on the Portland Canal mine are so wonderful, that the inference is that something equally good, or better, will be found if this line of country is systematically explored.

So far, outside coal and gold, the minerals of interest in the province are essentially silver, lead, and copper, the province producing last year over 10,000 tons of lead and 15,000 tons of copper. In almost every case, the lead is associated with silver, and the copper with gold. The actual silver won is roughly 2,000,000 ounces, and the gold £1,000,000 sterling, of which about 75 per cent. was obtained from smelting copper-bearing ores, and less than £100,000 worth came from the alluvial fields.

It is in the revival of alluvial mining that the next advance of British Columbia should be made. Although

gold has been won in the bar of the Fraser, and as far up the Fraser as its junction with the North Thompson, in the Tulameen River and in the Columbia north of Revelstoke, the mass of the gold has been won from the "placers" of the Ominica and the Cariboo. And of the fifteen million pounds in alluvial gold won in British Columbia, quite 85 per cent. has come from Quesnel mining division of the Cariboo district. Although the gravels have ceased to pay for washing without machinery, there are any quantity of them which can be made payable by hydraulic sluicing, and the advent of the Grand Trunk Pacific will make the cost of transportation of heavy machinery no longer prohibitive.

One company owning gravels about Quesnel Forks, and whose headquarters are at Bullion, have proved over 500 million cubic yards of auriferous gravel, from which 5*d.* per yard can be recovered by hydraulic sluicing. The provincial mineralogist reports very highly on the surrounding country. He states that this company has not one-fifth of the auriferous gravels, and that in this section alone it is a safe estimate to say that there are 3,000 million cubic yards of gold-bearing gravel. As the provincial mineralogist does not take into consideration the possibilities of deep levels which should run richer, the immensity of the amount of gold to be won at a profit is hard to grasp. Hydraulic sluicing efficiently run pays if a halfpenny worth of gold can be won from every cubic yard. Ignoring the deep levels and taking the provincial mineralogist's figures, the actual amount of gold which should be won from these gravels, virtually

in sight, is £60,000,000, of which £50,000,000 should be clear profit.

The other gold-bearing gravels, which are too far ahead of developments to consider at present, are beyond the Fraser watershed in the level country of the Nation Lakes, the Ominica and Inginika Valleys, tributaries of the Finlay, which forms the northern fork of the Peace. The Stickine River has been thoroughly prospected, with very unsatisfactory results. Over the watershed between the Stickine and the Liard recent exploration has shown the existence of extensive gold-bearing gravels in the Cassiar Mountains. The best of these occur where the Dease River leaves Dease Lake.

The minor alluvial discoveries in the Atlin are mostly "shed gold" propositions, and point to the existence of bodies of free-milling quartz.

In the Government handbooks it is claimed that British Columbia has the best mining laws in the world. This is open to question. In the old days the ink was hardly dry on the Statute Book before the law was changed. But since McBride became Minister of Mines the laws have been got into shape, and have remained virtually unaltered during the last eight years.

A free miner's licence costs £1, and has to be renewed each year. With a free miner's licence the owner of the licence can stake 1,500 feet by 1,500 feet on any reef or lode. If he wants to secure the whole length of the reef he has discovered, he must have powers of attorney from other holders of miners' licences. His own licence can be used as well on a reef other than the one he has first staked.

To obtain a Crown grant of the mine it is necessary that £100 worth of work should be done on each claim ; this work can be spread over five years, provided that £20 worth of work is done each year. Surveying the claim is allowed to reckon as £20 worth of work. In the event of work not being done a payment of £20 may be made to hold the claim, and when £100 in payments or work have been done, and the claim surveyed, the holder can have his Crown grant. The area of each mining claim is roughly fifty acres.

In " staking " a claim three posts must be put up. The first, the " discovery post," at the point where the mineral in place is found. The " legal posts," Nos. 1 and 2, must be placed 1,500 feet apart, as near as possible, on the line of reef shown by the " discovery post," and mark the boundaries of the claim. On each of these three posts must be written the name of the claim, the name of locator, and the date of location. On post No. 1 must be written " Initial post." The direction of post No. 2 must be given, and how many feet of this claim lie respectively on the left and right of Nos. 1 and 2 posts. In timber country the line between Nos. 1 and 2 posts must be blazed, and in bare country monuments must be put up, so that the line may be distinctly seen.

Recording must be done within fifteen days, one day extra being allowed for each ten miles distance from the recording office after the first ten miles. The fee for recording is £2.

Companies " staking " claims pay £10 a year for their free miner's licence if their capital is under £20,000, if over £20,000, £20 a year.

The fee for Crown granting is £5.

The above laws refer entirely to reef or ore bodies. The laws dealing with alluvial mining make the length of each claim 250 feet, the width being 250 feet to 1,000 feet, according as the "placer" is found in "dry diggings," "bar diggings," or "creek diggings." The pioneer discoverer of "placer" is entitled to one claim 600 feet long. "Placer" claims must be recorded each year. To hold them, unless there is an insufficient supply of water, work on them must be continuous.

The taxation on mineral and "placer" claims once they are Crown granted is 1*s.* an acre a year, but if £40 worth of work is done, this tax is not levied. The Government levy a tax of 2 per cent. *ad valorem* on all ore mined. If less than £400 worth of ore or "placer" is mined, the whole of this tax is refunded. If less than a £1,000 worth, half the tax is refunded. Further, 2*s.* a thousand is charged for all timber cut for mining purposes.

Leases for hydraulic mining, which cover half a mile of creek or eighty acres of gravels, are granted for periods not exceeding twenty years at prices from £10 a year upwards, and a condition is made that at least £200 a year should be spent in development work.

To obtain the right to prospect for coal or petroleum, land is "staked" by placing a stake at one corner of the section desired, writing the locator's name on it, and describing which corner it is. Conspicuous notice must be kept posted on the land for thirty days, and also at the Government office in the district. The intention of applying for a licence must be advertised

in the *Government Gazette* and in one of the local newspapers.

The applicant for a licence then sends a description of the land and a fee of £20 for each square mile covered by his "staking" to the local land office. If no *bonâ fide* objection is raised, the Minister of Lands grants the licence for one year. The licences may be renewed for a second and a third year.

If coal or petroleum are found, the land may be leased at $7\frac{1}{2}d.$ an acre for five years, and a subsequent renewal for three years is granted for a £20 fee for each square mile. During any period of the lease, provided the licensee has been continually working, the land can be purchased, and the coal rights under it, for £4 an acre. If the surface rights have been previously alienated, the charge is £1 less an acre.

The Government levy royalties of $2\frac{1}{2}d.$ on each ton of coal mined, and $1\frac{1}{4}d.$ on every thirty-five gallons of petroleum won.

Outside Rupert, the route of the Grand Trunk Railway, and the Queen Charlottes, the coal business has got into very powerful hands, and it would be almost impossible for an outsider to "cut in." There is a very limited amount of coal (some of which is anthracite) in the Queen Charlottes. The great coal field of British Columbia begins 100 miles in from Rupert, and ceases about eighty miles further east; it extends roughly 300 miles north and 300 miles south of the Grand Trunk's route. It is impossible in this book to make any attempt at describing this coal area. Some points of strategic importance may be noted:—Telkwa, on the Grand Trunk; Kuldo, on the Skeena, sixty miles

north of the Grand Trunk's route ; and, possibly, some point in the Naas Valley.

The coal at Kuldo and the Groundhog Basin is undoubtedly of very high value, as much of it is anthracite.

Although in many places sepages of rock oil (petroleum) occur, the discovery of oil fields in British Columbia is most problematic, on account of the great volcanic activity in the past. There are considerable areas of oil-bearing shales in the Queen Charlottes, but the question of whether the oil can be pumped out of them economically has not yet been investigated. British Columbia will probably draw on Alberta or southern Alaska (Katalla) for her oil supply.

Of the other minerals that have been found in British Columbia, zinc, platinum and antimony are found in small quantities. The province is producing £26,000 worth of zinc from one of the mines of the silver-lead district of the Boundary country. Platinum is found in most of the alluvial workings, but in such a small way that it does not pay to recover it. An absolutely inexplicable reef of antimony occurs on the mountain side above the Portland Canal mine. Iron is found throughout the province, mostly as magnetite, and its possibilities I discuss in my chapter on " Prospective Developments."

Most of the building materials must, on account of geological formation, come from Vancouver Island, and already there are marble quarries, plants making red brick and fire-brick, lime and cement works, on the west coast of Vancouver Island and on the Sannich peninsula.

A big gypsum deposit, which will make first-class plaster, is found near Nicola Lake, at Merritt, and there is also coal in this vicinity.

In a country that has been so subjected to glacier action, sand and gravel can be found almost anywhere.

CHAPTER VI

FORESTRY AND LUMBERING

ALTHOUGH moving from place to place, I have spent ten months in the interior of Vancouver Island, and have had four cruises the length of the coastal belt. I cannot describe what I have seen, and I little wonder at the pithy remark a timber cruiser made to me: "So marvellous is it all that the only way to tell the truth is to lie about it."

Growing in a climate mild and damp, the coastal forest in the State of Washington and southern British Columbia is the highest, densest and most luxuriant in the world. The magnificent timber of the Olympics and of the western slopes of the Cascade Range is only surpassed by that of Vancouver Island, on which is to be found 70 per cent. of the forest wealth of British Columbia. The red woods of California — a comparatively small area, now destroyed by fire and ruthless exploitation—one can bring home to the average reader. He can see Wellingtonians and Sequoias trying to grow in many an English park; he can see a section of one that nearly reaches to the dome of the South Kensington Museum; but better far, he can see a coach-and-four being driven into a tunnel cut through the base of one of these giants—the trade mark of every bottle of Californian wine. Not so large as the

red woods of California, but in far greater profusion, are the forest trees of the coastal belt.

Douglas fir, giant *Arbor Vitæ* (the " cedar " of the West), hemlock, black spruce, balsam, yellow " cedar," and white pine are the monarchs of the woods. One wonders how such trees, many of them eight feet through and 300 feet high, standing seventy or more to the acre, can find food for their growth. For, with the exception of the spruce, their roots do not go down deep, and they are merely " sitting " on beds of clay, boulders from glaciers, bare sandstones, and the shales and gneisses of the mountain sides.

Vancouver Island, a country as large as Switzerland, contains these trees at their best. The Douglas fir—the Oregon " pine " of commerce—attains proportions unknown elsewhere, except in the fjords south of Knight's Inlet, and north of the foothills of the Olympics. Though in the main the trees of Vancouver Island are the Douglas fir, the " cedar " and the hemlock, it contains representatives, with the exception of the red woods, of all the flora of the North Pacific coast. Here and there an English yew, on the seaboard the red-barked arbutus, in the south two different oaks, in damp ground not taken up by small " cedar " and black spruce are patches of poplar and cotton-wood growing in rich, black swamps ; crab-apple and cranberry in stiff clay, alders in wet sandy bottom-lands, clumps of willow (black and red) in open marshes, and occasional hay-meadows covered with either wild rye, cowgrass, hardack (one of the *Spiræas*), bog-cranberries and dwarf rhododendrons make an occasional break in the sombre, silent forest.

Young trees coming up, thickets of salmon-berry, blackberries, wild raspberries, blueberries, huckleberries and the damnable devil-clubs with their poisonous thorns and more poisonous red berries, do not make it easy walking. The tangle of sal-lal (a sort of forest heather) and the covering of the yellow-flowered, blue-berried barbary ("Oregon grape," as they call it), moss everywhere on stones, on the lower branches and the north-east sides of trees, together with many species of seemingly Japanese flora, replace in parts the otherwise dense undergrowth. Rotten logs and windfalls criss-crossed to form almost impregnable fortifications stop any great rate of progress through the forest, and no wonder that settlement—for there are few trails and fewer roads—is held back, despite the fact that much of the coastal belt is the ideal climate of the temperate zone.

I cannot leave the woods without mentioning some of their fauna. There are two kinds of harmless snakes, very much like the grass snake of Europe, which live on the mice that find their food in the forest, and one or two little owls help them in their work. The chipmunk, almost identical with the English squirrel, naturally abounds where the seeds of fir cones are found in such profusion, and his cheery chuckling breaks the silence of the woods. Bird-life does not abound except near settlements. There is a nice little humming bird which is very, very tame; blue birds (a sort of starling) whom the farmer hates because they attack his potatoes, a black-headed tit, a robin as big as the English thrush, and a dozen or more kinds of woodpeckers, whose tap, tap, tap all day long is only broken

by the occasional thud of a falling tree. There are two kinds of blue grouse, and another grouse called the willow-grouse, but their increase is prevented not only by man, but by the vermin in the woods. The vermin —it seems rather a shame calling valuable fur-bearing animals vermin—are first and foremost the harmless little black bear, who eats bark and the young shoots of trees during the spring, gets quite fat on berries during the summer, gorges himself on rotten salmon in the fall, and sleeps with his paw in his mouth in a hole all the winter. Next in importance is the cougar, sometimes called the panther or mountain lion, who is a hindrance to sheep-raising on Vancouver Island (so much so that the Government give a reward of £5 for each one killed). He is the best sport on the coast, but is hard to hunt, except with specially trained dogs. A character, named Cougar Smith, makes his living killing them, he having in the last ten years bagged over four hundred. Racoon (the terror of the hen-roosts), martin, mink, wolverine (half badger, half bear), beaver, timber-wolf, are still more or less common in spite of the inroads of the trappers. For the rest of the game I refer any reader to the Government Official Bulletin No. 17, which deals with the whole fauna of the country.

The forests of the interior, although covering a far larger area, are totally insignificant compared with the forest of the coastal belt. In the desert country of the south there is virtually no timber at all, except close in to the mountains. The northern interior is timbered sparsely all over, but the forests have no economic value outside their own immediate local market.

However, in the kloofs of the wooded mountain sides are found clumps of timber, isolated patches of which compare to the poorer timber on the coast, and have a value for sale in the growing markets of the prairie.

Some of the fauna of this country make it more of a sporting country than the coastal belt is. There is the moose, which is increasing in numbers, two kinds of wild reindeer, which are called caribou, a few elk (there are several on Vancouver Island), three kinds of deer, and four kinds of sheep, including the big-horn, and in the mountains, goat. Birds too, with the exception of fish-eaters, ducks and geese, are far more common in the interior than on the coast, and good shooting may be had of blue-grouse, willow-grouse, prairie-chicken, fool-hen and ptarmigan. The skunk, a seemingly tame weazel with whom it is dangerous to make friends, as he leaves an odour which cannot be got rid of should anyone frighten or offend him, is common on the mainland, but unknown on Vancouver Island. The grizzly, too, is common enough in the mountains, but unknown on Vancouver Island. Poisonous snakes ("rattlers") are common enough in the southern desert, but cease once the northern interior is reached, and there are no poisonous snakes on Vancouver Island.

I do not think that European capitalists should investigate any timber outside Vancouver Island, a few of the Chain of Islands, and the fringe of mainland south of latitude 54° (roughly the mouth of the Skeena). Timber here, as elsewhere in British Columbia, is held under very varying conditions. In some of the older Crown grants, the timber is the property of whoever owns the land in fee simple. In later Crown grants the Govern-

ment has a claim for 2*s.* a thousand on all timber cut. Timber leases, which are now no longer granted, were mostly for twenty-one years, and apparently many are by the terms of the Act renewable in perpetuity at their original rental and royalty, which in some places will come to less than 2*s.* an acre, and no stumpage charges. By far the greater part of the timber land and timber of British Columbia is held under various sorts of licences. The discussion of these licences is hardly necessary in a book of this type.

The amount of timber alienated by the eight or nine different ways of holding it is roughly one-sixth of the timber held under special licence. It was the alienation of the timber that brought the Government of British Columbia from a state of bankruptcy to comparative affluence. By the Act of 1905, timber could be obtained under licence from the Government in blocks of a square mile at a rental of 1*s.* an acre per annum. Most of the licences are for twenty-one years, and are subject to a taxation of 2 per cent. *ad valorem*, and a royalty of 2*s.* a thousand on all timber cut. Further, the timber must be manufactured in British Columbia, when, as the area is cut off, the owner of the lease may, if he desires to do so, surrender it to the Crown, or keep on the lease as long as he pays his annual rent of 1*s.* an acre. Apparently, these licences are in perpetuity, although the Government has the power, at the expiration of the original term of the licence, to raise the royalty to what price they think fit.

A thousand of timber is 83⅓ linear feet of planks, 1 inch thick and 1 foot wide, and in estimating the cubic contents of standing timber, only the actual

portion that can be cut into planks in the mill is considered. Estimating timber in the raw has more or less become a profession in British Columbia, and so highly are some of this profession thought of, that a report signed by a recognised man is good for an overdraft in the bank. Most timber cruisers under-estimate instead of over-estimate, and as the forest is continually growing, timber land always contains more timber than the amount estimated by the cruiser.

Timber, like real estate, is worth what it will fetch. The lowest price I heard quoted was just under 1*s.* 6*d.* a thousand for timber held under licence. For Crown-granted timber, including the land as well, as much as 18*s.* a thousand was asked.

It costs 8*s.* a thousand, more or less, according to the accessibility of the timber, to fell it, cut it into suitable lengths, get it into the sea, tow it to the mills, and haul it up to them. The cost of manufacturing lumber in the rough is 8*s.* a thousand, and to this must be added 2*s.* a thousand for overhead expenses and depreciation of machinery. The actual expenses of turning a thousand feet of standing timber into rough boards or railway sleepers—ties, as they call them in Canada —under the present extravagant methods should not exceed in any case £1 a thousand. The local market price for rough lumber is 56*s.* a thousand, and the prairie and world's markets considerably higher.

Compared with the standard prices in the American national forests in the States of Washington and Oregon, British Columbia timber is decidedly cheap. The general prices for standing timber in the States on the Pacific seaboard are roughly as under :—



Photo by courtesy of Can. Pac. Ry.

A BOOM OF LOGS

Douglas fir . .	10*s.* a thousand.
"Cedar" . . .	12*s.* ,, ,,
Hemlock . . .	9*s.* ,, ,,
Spruce . . .	12*s.* ,, ,,

On an average stand of 60,000 to the acre, the capitalised charge for licence-rent and taxes, is less than 6*d.* a thousand, add to this the 2*s.* a thousand stumpage, and the reader will see that timber which is now offering at 1*s.* 6*d.* a thousand, comes to 4*s.* a thousand in all, as against the United States prices of 12*s.* to 14*s.* a thousand, and I think it would well repay London capitalists to buy big blocks of timber.

The advantages of London handling the timber are several. In the first place, London, being the exchange of the world, can sell lumber wholesale in Australia, South Africa, India and China, quicker and to better advantage than can be done from the coast. In the second place, London is never frightened of prime cost, and to run a timber proposition efficiently, very big sums are needed.

So far, the mills have been in the big cities, partly on account of the local market, and partly to enable their owners to keep up the price of real estate, by having a large number of men on the pay roll, whose wages are spent in the immediate vicinity of the mills. It is evident that to work the timber business on an economic basis, the mills must go to ports in the heart of the timber country. The comparatively small cost of building wharves and making any one of the hundred and one small fjords and bays into harbours fit for ocean-going steamers is nothing compared to what a

big mill, cutting 1,000,000 feet a day, wastes in towing, etc.—£400 a day and over, or capitalised £10,000,000. Some of the figures for starting in the timber business on a big scale I give below :—

Five hundred acres of land and a good port could be bought for under £20,000. A first-class mill could be erected for another £20,000. Thirty to forty square miles of timber running from 20,000 to 400,000 could, if held under licence-rent, be bought for less than £100,000 spot cash. A logging railway costs about £4,000 a mile, and perhaps ten miles would have to be built, and another £20,000 should buy engines, trucks, "donkeys" and all the necessary plant. On these figures, with a capital expenditure of £200,000, the profits should not be less than 250 per cent. per annum.

There is far less danger of fire on Vancouver Island and the coastal belt than people think. In the drier interior, when fire has got a move on, it sweeps everything before it, and if not taken in hand at the very start, no power on earth can stop it. On Vancouver Island the timber stands like a wall, and this, together with the absence of winds during the dry season, prevents a fire making quick progress, and enables it to be very easily controlled. The Government, too, have organised a very efficient Forestry Department, and have made fire prevention laws, almost Russian in their rigour.

The Government ceased in 1907 alienating any more of their forest resources, and timber to be obtained must be now purchased from private parties. The timber that remains in the hands of the Crown is being



Photo by courtesy of Can. Pac. Ry.

A LOGGING RAILWAY. VANCOUVER ISLAND TIMBER

cruised and mapped by the newly organised Forestry Department. This department was organised last year as a separate branch of the Lands Department. The departmental head is Mr. W. R. Ross, whose statician, Mr. A. Grainger, was a Cambridge Wrangler, and subsequently secretary of the Royal Commission on Forestry in 1910. Mr. Grainger's book, "The Woodsmen of the West," describes better than any other book dealing with British Columbia the timber of the coastal belt, and the methods employed in logging. The officer charged with surveying and cruising of the Government timber was one of the officers of the Indian Forestry Department. Mr. McMillan, the chief executive officer, is a forest graduate of one of the Canadian Universities, and his name is known in Europe as well as Canada and the United States. A chief fire-warden has been appointed, who has thoroughly organised the system of fire control, and the pay of fire-wardens—£1 a day and expenses—is sufficient to attract good and capable men to the service.

The great problem that confronts the Department is how logged-off areas should be dealt with. When an area is logged-off, within a few years it becomes a wilderness of second growth, the less valuable hemlock replacing to a very great extent the more valuable Douglas fir. It has been suggested that these areas should be re-afforested with deciduous trees, which in years to come would be valuable for pulp, and whose annual fall of leaves would produce sufficient humus in the soil to make it ultimately valuable for farming. My own idea, and I bring this prominently forward in the book, is to clear most of these areas on a large

scale and on the most economic basis, and lay them down to grass, and thus save over a million pounds a year to the province for the annual importation of hay, heavy horses and meats.

To deal with by-products which are neglected in the present extravagant exploitation of the forest is beyond the scope of this chapter. Nor can I go into the figures of making pulp. Practically every kind of timber can be used in this industry, and for the capital expended there is actually more money in it than in lumbering, as the demand for pulp and paper is in excess of the supply.

With regard to the tenure of timber, an entirely wrong idea prevails. A timber licence, on which the rent is 1*s.* an acre a year, compares most favourably with a freehold in point of view of present purchase price. It is in every way as secure as a freehold, and the royalty of 2*s.* a thousand levied by the Government on every 1,000 feet of timber cut cannot be increased for at least thirteen years from the present date.

CHAPTER VII

THE FISHERIES AND THEIR FUTURE

In my chapter on geography, I wrote at length on the submarine prolongation of the western coast of North America, the greater part of which is in Canadian waters. This submerged plateau or "banks" is uniformly level, varying in depth below the surface from 30 to 100 fathoms, and is the feeding ground of schools of whales and hundreds of dog-fish and other kinds of sharks.

In former times the sea-otter abounded, but the demand for their skins led to their virtual extinction by the coast Indians. The walrus, another destroyer of fish, is still by no means rare, and is occasionally hunted by whalers. One boat, I remember, in fourteen days' work "cleaned up" £2,000 out of killing walrus—this from the sale of hides and tusks alone, as the meat and fat were thrown overboard. The fur-seal was killed in Alaskan waters, an industry now knocked on the head by the Behring Sea award. In British Columbian waters are several hair-seal and sea-lion, but their value is so small that it does not pay to hunt them specially. Last year's catch was about 5,000 skins, and worth only about £600.

As regards whaling—a world industry that has recently revived owing to improved methods—the

North Pacific Coast is hardly abreast of the times, and has yet to learn the efficient methods with which this business is being conducted in the southern hemisphere. In the good old days, the San Franciscan people were much to the fore in whaling, and managed to make a clear £2,000,000 sterling out of killing right whales off the northern coast of Canada.

The right whale, from which oil to the value of £2,000 can be won from a single carcass, is comparatively rare in British Columbian waters, but sulphur-bottoms, bow-heads, humpbacks, sharp-headed finners are still common. These whales after paying all expenses at the whaling station for the recovery of the various products, oil, body-bone, whalebone and fertiliser, should give net profits as under :—

	£
Sulphur-bottom	100
Bow-head	80
Finback (sharp-headed finner) . .	70
Humpback	30

The business is a good one, and should pay on the actual money invested (not watered stock) at least 40 per cent. per annum. One of the whaling companies on the west coast of Vancouver Island has captured on an average 600 whales annually—this for some years.

The other fish destroyers that have a commercial value as oil producers are the basking-shark and several varieties of dog-fish. The basking-shark is found in numbers round the Queen Charlottes during the summer months. They are huge fish, perfectly harmless, and so tame that they can be stroked with the hand while resting close to the surface of the sea. The liver

of an average basking-shark gives about 150 gallons of oil. The smaller sharks (the dog-fishes) are a nuisance, for not only are they most destructive to the food fishes, but they get themselves caught on the halibut lines, and will, seemingly for very wantonness, completely wrap themselves in the salmon drift-nets. The industry of exploiting these fish is in an infant state in British Columbia, and up to the present, the various companies are winning £12,000 a year from their oil and £70,000 from their other products. One enterprising firm has already started canning them, and a brand of dog-fish is on the market under the pseudonym of " Japanese mackerel."

So far, the commercial fishing of British Columbia is essentially salmon catching and canning. It is one of the coast successes. Though the banks have helped the industry, little or no outside capital has been employed. Spread along the coastline at the mouths of rivers and in the inlets are some fifty canneries. These canneries are run very efficiently—machinery wherever possible replacing manual labour—and put up roughly 1,000,000 cases every year.

The so-called salmon of the Pacific is not a true salmon, but so like in shape and taste that the name holds, and this fish has become the salmon of the world. Its principal varieties are :—

(1) The Sockeye.
(2) The Spring Salmon.
(3) The Coho.
(4) The Dog Salmon.
(5) The Humpback.

The Sockeye, which weighs from 3 to 4 lbs., is the one most sought after by canners, and is in the largest numbers. The Spring Salmon, the gamest fish, weighs 20 to 100 lbs., and for eating fresh is undoubtedly the best. The canners do not like him because his flesh has not always the same rosy hue after handling. The Japs are making quite a success of salting Dog Salmon, which weigh about 12 lbs. Recently they have been canned wholesale, and it is hard to tell the difference between a can of Sockeye and a can of Dog Salmon. The Humpback so far has been made little use of.

The industry of drying and smoking salmon has hardly commenced in British Columbia, and the chances here are enormous. I have often bought dried salmon, and only once do I remember being supplied with " lax " like they turn out in Norway.

The export of frozen salmon has already begun to New Zealand and eastern Canada, and the day should not be far off, with the improvements in cold storage, when it should be selling in the London market, as Australian mutton is sold now.

The Americans in the south and in Alaska, by over-fishing, have virtually destroyed their rivers, but the Dominion and Provincial Governments are making every effort to keep up their " capital " stock of fish. Several of the rivers have had salmon ladders made in them, and log-jambs and other obstacles have been removed. Hatcheries have been established by private enterprise as well as by the Government, and some twelve or more are now in perfect working order. In the northern waters, the exact number of boats allowed to fish for each cannery is strictly controlled by the

Government, and the " rating " is fixed for a period of five years by the Provincial Minister of Fisheries (Attorney-General). Strict laws are in force with regard to the methods employed in fishing. These cover drift-fishing, seining, and catching salmon by means of traps. So determined are both the Dominion and Provincial Governments that the salmon-fishing shall not be overdone, that no licence to put up a salmon-curing or salmon-cannery establishment is now given without the direct concurrence of the Dominion Minister of Marine and Fisheries.

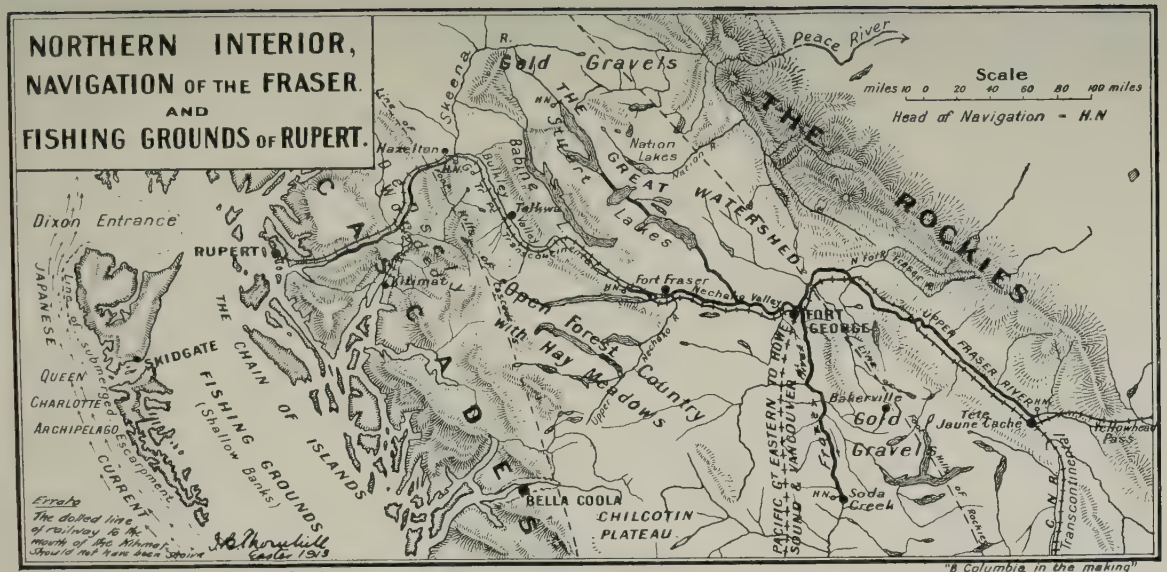
The Government handbooks describe the halibut as next in economic importance to the salmon. I question this. The halibut is in far greater numbers than the salmon. The Americans are taking out of their waters, and the British Columbian waters as well, a toll of halibut that is equal to 50,000 head of beef a year. Gasoline fishing schooners out of Seattle, with a crew of ten men or less, often take over 250 tons of this fish in a week's work, including the trip out and home. The methods employed are very much behind the times, the fishing vessels putting out the small boats (dories) they carry, and the halibut being caught on lines. Even with these methods local fishermen reckon to catch as much " prime " in half an hour's line fishing as can be done in eight hours' trawling in North Atlantic waters.

So far the halibut fishing has been held back by want of markets, but on the completion of the Grand Trunk Pacific's trans-continental line, the British Columbian waters will be in point of view of " time-distance " no further off than the White Sea, north of Russia, where

over eighty British vessels are fishing at present. In this connection, some figures are of special interest. The New England Fishing Company are catching and marketing over 2,000 tons of halibut a year. They find that they can catch or buy their fish away north, and get it into Vancouver for ¾*d.* a lb. They can freeze it and rail it across the American Continent for less than ¾*d.* a lb., and they sell it in the markets of the United States of America and eastern Canada for from the wholesale price of 3½*d.* a lb. to the retail price as high as 2*s.* a lb.

When the Grand Trunk is through, it should be feasible to catch halibut (for Rupert is right on the fishing grounds) and land them in the cold storage plant for ½*d.* a lb.; ¾*d.* should pay the cost of railing them across Canada and handling them at points of shipment, and ½*d.* a lb. should see them across the Atlantic to England. Allowing ½*d.* a lb. for distribution through the British Isles, any price obtained wholesale over 2¼*d.* a lb. would be pure profit. To try and put my figures more clearly, if anyone were to run one refrigerator car (33 tons) every day from Rupert to Halifax, and ship across the Atlantic in cold storage, the profit on the enterprise, assuming only 1*d.* a lb. were cleared, would be £100,000 per annum. Such an enterprise is an absolute certainty, for it means that if halibut could be retailed in England under 6*d.* a lb. everyone would buy it.

The herring fishery has started in a small way in British Columbia, and the scope in this industry is immense. One of the inspectors of the Fisheries Department showed me a photograph of an inlet about three miles long and about half a mile wide, from which the



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THE COUNTRY OF THE GRAND TRUNK PACIFIC

tide had gone suddenly out and left covered with herrings about 3 feet deep. I think this photograph fully bore out the statement in the Government handbook, that herrings are in great abundance in British Columbian waters. The actual output of herrings from British Columbia, smoked, canned and salted, is 25,000 tons, the Japs having the bulk of the business.

The Americans are a long way ahead of us in cod fishing, British Columbia's catch being valued at less than £10,000 as against £2,000,000 for the fish caught by the California and Washington fishermen. These figures show the opportunities in this industry in British Columbian waters. The Pacific cod, on account of its fatness, requires a special drying process to prevent it becoming rancid. Sun-drying, it is stated, will not produce the necessary hardness. A mechanical drier has been designed, and has been used with satisfactory results, which dries cod in forty-eight to sixty hours.

I have not the space to deal at length with anchovies, sardines, smelts, flounders, rockfish (bass and perch families), shad, sturgeon, crustaceans and the various molluscs with which the British Columbian waters abound. Two oil-bearing fish that are unknown in European waters deserve special mention. These are the ratfish and candlefish (oolachan). Both are good eating, but are too tender for carriage, and have therefore only a local market. The economic value of the ratfish is in the fine oil which can be won from it, the oil being used for the finest work in watches, gun-locks, sewing machines, etc. The oolachan is so plentiful that it can be scooped up in bucketfuls. The Indians catch them in immense numbers and extract

from them "oolachan grease," which they use as much as we do butter. Oolachan oil properly refined would undoubtedly become of commercial value, as there is practically no limit to their numbers.

The sea-slug or bêche-de-mer, a repulsive-looking, big flat worm, from half a foot to two feet long, is very plentiful. Chinese and Japanese fishermen on the coast collect it in small quantities for their own use, but so far have not started exporting it. I mention this because China imports bêche-de-mer to the value of £130,000 annually, getting most of it from Asiatic Russia.

I have dealt with the fisheries as concisely as I can, and before leaving them I must mention two English companies that have recently "started in." One is the Canadian Northern Fisheries, a company promoted by Messrs. Mackenzie and Mann, and the other is Sir George Doughty's enterprise, "The British Columbia Fisheries." The first-named is established on the west coast of Vancouver Island, and so far is almost entirely in the whaling business; the other is established at Skidgate, on the east coast of the Queen Charlottes.

Doughty's enterprise has attracted considerable attention in England, and some rough notes of it are worth giving. So confident was I in the future of a fishing scheme near Rupert, that at first I very much wanted to get in with Doughty, but taking everything into consideration, I feel I could do far better by interesting others, as the field is virtually unlimited.

London has shown little enthusiasm for Doughty's enterprise, and the shares of the British Columbian Fisheries are selling at a discount. British Columbia

laughs at the local management of the company because of the way it is going to work, and also because it seemed at one time financially behindhand, a surprise to those who looked on Doughty as the "fishing king" of England. However, although strong things might be said against the British Columbian Fisheries, I am confident of their ultimate success, and of their making far greater profits than the figures given in their prospectus.

Doughty bought one of the canneries, some land round it, and also 250 acres of land in Porpoise Harbour (Prince Edward), on the Grand Trunk Pacific Railway, eight miles from Rupert. He has built an oil-refining plant, a saltery and establishment for making fertiliser, and he has sent three steam trawlers out from Grimsby, which are now on the ground. He also purchased the American halibut schooner *Edrie*, which was confiscated for poaching in Canadian waters. In addition, he has a steam tug, scows, and several excellent small boats for working the inside waters. His company also owns some forty licences of various sorts issued by the Government of the Dominion of Canada and the Provincial Government as well. With these and the erection of the usual houses, offices and stores, I have no fault to find, but what I do object to, is the employment of Indians and Chinese. Doughty expressly stated that he went to British Columbia with a view to establishing the fishing trade in all its branches, to be operated by white fishermen. In the report of his son for last year, I find that they have built houses to accommodate eighty Chinamen, and I have reliable information that they intend to employ coast Indians

to help them. After peddling all this "hot air" about allowing the fishing to drift into foreign hands to the impoverishment of British Columbia, I look on Doughty's employment of Asiatics and Indians as a grave scandal, and I do not consider that he deserves any help whatever from either the Government of Canada or the province. I know that he "put up" a suggestion to the Minister of Marine and Fisheries, that Canada should import and settle white fishermen on the coast. This was quite unnecessary. A company with a quarter of a million pounds capital could have got a hundred Europeans out for less than £2,000, and this sum could have been recovered from their wages later on.

The field for fishing in British Columbia is for all, and there is no need to have a quarter of a million pounds sterling to begin with. One trawler or drifter in those waters, owing to the number of fish, is equivalent to about fifteen or sixteen in England. To "start in" with a fleet of seven steam or, better, oil-driven fishing vessels, buy a small harbour, and erect the necessary buildings would cost well under £100,000, and properly managed should produce a net revenue of £100,000 a year. There is even a better field in helping white fishermen with gasoline boats, supplying them with land, and marketing their fish in England. This would need very much less capital, and offer probably as good returns. So great a start has the fishing industry at Rupert already got, that the mosquito fleet (gasoline boats costing from £30 to £500) is already 170 strong, and the cold storage plant erected by a local company is one of the largest in the world. It is not the intention

of the British Columbian Fisheries to market other people's fish; they are not likely to get any services from the local fishermen. Anyone who will market local fishermen's catches will secure both their friendship and services, as well as earn the thanks of the Provincial Government, which has made up its mind to have the Pacific Coast of Canada for a white man's country.

Some of the markets for the fish are worth noting. China and Japan (excluding bêche-de-mer) import £275,000 worth of fish, and the field is almost virgin still. The Straits Settlements import fish to the value of £1,800,000 per annum, of which Canada so far supplies less than £2,000 worth. Australia and New Zealand import over £300,000 worth, of which £70,000 is supplied by Canada. One of the great fields outside sending refrigerated fish to Europe is to be found in the fish-eating (Catholic) countries of South America on the Pacific seaboard. So far this trade is less than £30,000 a year from all countries, but its chances are now good with the establishment of several steamship lines running down the coast from Vancouver to Valparaiso.

CHAPTER VIII

OPPORTUNITIES AND SOME SUCCESSES

CANADA has been very aptly described as the "land of opportunity." The opportunities for speculation are almost unlimited, as the work of creating values and the capitalisation of a continent goes on. Outside speculation (getting hold of town lots, acreage, natural resources, and reselling them), the most certain field is farming on the prairie.

The prairies of Canada are in the provinces of Manitoba, Saskatchewan and Alberta. The agricultural area of Manitoba is exceptionally small; Saskatchewan, on account of its hotter summers, is reputed to be the better grain-growing province; Alberta, much of which is a bed of a comparatively recent inland sea—rich alluvial soil, which will never run out—is undoubtedly the best country for mixed farming. Saskatchewan is more American than English; Alberta is essentially British. As far as resources, other than agricultural land—Saskatchewan has only a very small coal area underlying its western border, while Alberta is one vast coal field from which natural gas can be obtained almost anywhere by boring and coal-oil (petroleum) is certain to be found in abundance.

As the average emigrant to Canada has very little money on his arrival, he rightly chooses the prairie, which is being covered by a vast network of railways,

along which (seemingly the work of some great magician) spring up 400 new towns every year. The opportunities in these towns are legion, but the greater opportunity is in farming, owning the land farmed, and selling out when the rigours of the prairie begin to tell.

In Thwaite's " Alberta " the amount of capital given as necessary to start is £120. This figure is far too low, and the minimum capital should be £300. With this sum, and at least a year's experience working for wages, with continuous effort and intelligence, there is no reason why a man should not get out with £8,000 cash at the end of twelve years. In taking up land on the prairie, it pays either to buy right on a railway line—the terms are very easy—or to homestead at least thirty-five miles from an existing railway line, as it is the practice of the great carrying companies to parallel each other's routes about this distance apart.

For the small man it does not pay to get hold of more than half a section (320 acres), as he can work this himself with horses. A section, to be economically worked, needs a gasoline tractor. The man, who is " out to make " a great fortune out of farming, must have adequate capital, to purchase large steam or gasoline plants, and to make a first payment on some thousands of acres of land. The man without money, unless he wants to plough with a horse and cow all day, milk the cow in the evening, and ride the horse into the nearest town with the milk, must necessarily become a speculator, and take up a homestead, with a view of selling out, as soon as he has got his title.

To get a title to 160 acres free Canadian land, it is

necessary to record a homestead entry on a quarter of one of the squares into which the Dominion Government has divided up the prairie province, put up a rough hut, plough a few acres, and live on that quarter section for six months each year during three years. Anyone who can succeed in doing this wins his bet with the Canadian Government, for he can sell once he has got his title straight off the reel. The bet is practically £350 to £2 that no one will do it. There are other and easier ways of getting hold of land, as the emigrant will find out when he gets wise to the ways of the country.

Although the object of my book is to benefit British Columbia, I certainly should advise any intending settler to go on the prairie and to *plump* for Alberta. Personally, although I advise others to go there, I myself would not settle on the prairie, as I dread the winters after twelve years of tropical Africa. The winters, however, should not deter a youngster, who is determined to get hold of a good round sum while he is still in the prime of life.

In British Columbia the opportunities are actually better than they are in the prairie, but the chances are far from self-evident, and many a man knocks round, going from one job to another, for years before he can find his right line, then if he, in Canadian parlance, "jumps in with both feet," he comes out on top. The Government of British Columbia very wisely only invite to their province men with a capital of at least £500 (this figure is rather too low), and men who can work with their hands, and are prepared to do anything in the shape of manual labour that offers.

The man who has enough money to buy a made place will naturally choose the east coast of Vancouver Island, preferably sea front. The man who has a little money, but not sufficient to buy a made place, has his choice of settling either in the northern interior, somewhere on the coastal belt, or in southern British Columbia. The great chance is undoubtedly the northern interior for the man who is prepared to go in for stock, and wait a few years for railway communications. The coastal belt offers the best life as it has the pleasantest climate, but land-clearing, unaided by finance, is a very serious problem. In southern British Columbia the conditions are easier. There are several colonisation schemes, and some of them are thoroughly sound and have good land (in patches), good communications and good markets to offer. I think everyone has heard of British Columbia fruit. This, in my subsequent chapter on "Farming," I have rather knocked, because so many real-estate men are selling any sort of rubbish as fruit land. Commercial orcharding is thoroughly sound, but, for the man who does not understand the game, or how to get his markets, to go into it is foolishness. The figures given in the different books—I mention Bealby's "Fruit Ranching in British Columbia"—are undoubtedly true, but it means at least five years' wait for returns. In the Okanagan Valley, and in the west Kootenay district, the tendency has been for settlers to put the whole of their land into orchard, in the belief that they will ultimately get a larger return an acre from apples and the like, than they could hope for from other produce. If they have horses, they feed them on imported hay. They eat imported eggs,

imported chicken, imported meat, imported butter, even imported jam, and they drink imported milk. Needless to say, the cost of living under such conditions is abnormal. Through lack of feed for their horses they are sorely tempted to have their orchards cultivated by contract. Only too many drift into a lazy life, demoralising alike themselves and their community. A mixed farming settler, on the other hand, is more or less self-supporting, and has work to do all the time and all the year round. He feeds his own stock and his own household. His orchard, *which should be one quarter of his farm*, is kept clean of insects by his chickens. Instead of kicking his heels for five or six years, waiting for his apples to grow, he is getting annual returns from his farm almost from the start.

No matter what part of British Columbia is chosen, the initial steps in settling are the same ; a living-house and barns must be built. The Canadian Pacific Railway estimate the cost of a five-roomed cottage at £200, but a log house can be built much cheaper, and is far more comfortable—cool in summer and warm in winter. The materials are always on or near the ground. As I write, I have before me the bill for the tools I bought when I "started in" myself, the cost being under £6. They included cross-cut saw, peavy, axes, augers, wedges, heavy hammer, two kegs of wire nails, a froe, and a draw-knife.

The first step in house building, after having selected the site, is to fell clean, straight-growing young trees, preferably of Douglas fir. After a sufficient number of trees have been felled, cut into suitable lengths, and barked with an axe or barking iron, the team should be

employed to drag them, one at a time, to the site. A logging-chain is hitched on to a log, and the chain attached to the whiffle trees, or better, a small triangular sledge (a trauboy) can be made and one end of a log lashed to it, thus preventing delays due to the unevenness of the ground. The next step is to pile stones to form pillars, and on these foundations the big bottom logs are placed. Small sticks are leant against these, and each log—correctly notched and saddled (it is easy to learn this work)—rolled into place, the small sticks that form the inclined plane on which the logs are rolled into place being adjusted to each successive stage. By these means, sides can be built up to 15 feet high without any great effort. Doors and windows are cut out of the logs after they are up with a cross-cut saw. For the joists to carry the floors, and for the floors themselves, rough and dressed lumber must be used, and it is best to use lumber for the boards over the rafters that carry the shingles or "shakes," which are used in British Columbia as slates or tiles are used in England.

Rafters are best made of straight young pine. Shingles are preferable to "shakes" and cost 10*s.* a thousand at the local mill. A thousand shingles will cover roughly 120 square feet of roof. They are thin sections of "cedar" cut in the mill and done up into bundles of a convenient size. The amount of lumber used will depend upon how far the property is from the nearest road. For it does not pay to haul manufactured materials too far over a rough trail on a sledge, when there is everything on the ground to be made use of. Should the settler decide not to buy shingles, he

must select a " cedar " about two feet through, fell it, and with his cross-cut saw cut it into sections about a foot wide, and then with his froe and a wooden mallet split it into slabs about one third of an inch thick. The slabs thus cut are taken to a felled tree, on which is rigged up a rough vice worked by the foot (two sticks, a nail and a bit of rope make this) and the slabs are shaved on one edge with the draw-knife. They are then " shakes." A good man can split a thousand shakes an hour, shave a thousand in an hour, and lay a thousand on the roof in an hour.

Windows and doors are obtained from the lumber mill, and cost from as under :—

Windows	4*s*.
Doors and frames	14*s*.

The last step in building is to collect moss and chink up all crevices between the logs, and face all the chinks with clay. A very good distemper, every bit as durable as paint, and which will not rub off, can be made by mixing 1 cwt. of lime, 10 lbs. of Russian tallow, some water and colouring matter ; and this should be painted over the inside and outside of the house to give it a finished appearance.

The house, similar to one in the accompanying photo, can be made in less than a month by two men, and excluding the cost of labour should not cost more than £30 for tools and materials. The brick chimney would be an afterthought, as good stoves can be obtained for a few pounds.

A team of horses and a waggon are a necessity in settling. The Canadian Pacific Railway put the price



A LOG HOUSE

of a waggon and team at £80. Although a fair team of "plugs" can be got for £60 it is better to pay a far higher price. Good Clydesdale mares will cost about £100 each and will produce foals each year that will fetch, as broken three-year-olds, the same prices as their dams. Heavy horses have great value, as by working them on the road they will bring in at least 24*s*. a day; more than this if working for a railway contractor. This working on the roads is one of the greatest stand-bys of every pioneer farmer. The Government are this year spending over a million sterling on road construction. This means that over 6,000 settlers will be able during eight months of the year to earn from £100 to £200 apiece of this money, for the residents in any district have the first claim to the Government road-work. The amount of road-making is in proportion to the number of settlers in the district. The men who are better off, but not well enough off to stand alone, work their teams on the road, and the men who have virtually no money can always get 11*s*. a day and upwards doing the rough manual labour.

A successful German farmer told me that unless a man "packed a woman in with him" he had little chance of succeeding as a farmer. There is more truth in this than appears. Much of the madness in Canada is due to the fact that men, after working hard all day, have none of the comforts of home life, and have to be content with their own thoughts and their own inferior cooking. This is directly flying in the face of the laws of Nature, for man is a "gregarious cooking animal." Hard as it may be on women at first, it is best every time for a man to marry and take the right sort of

companion in with him. Canadian girls stand the pioneer life well, so do women from the northern races of Europe, but our own women, whether they belong to the so-called better classes, or the so-called lower classes, shape rather badly, thanks to their impracticable home training.

Taking up a place in British Columbia does not mean that a man need remain a farmer all his life. He can participate in all the enterprises of the country, enjoy the sport it offers, and, being on the spot, can take the fullest advantage of the constant increases in value.

Some enterprises are self-evident. Keeping country stores pays well; they bring in a pound or two a day and upwards in net profits. Freighting in some form or other, either in the district or elsewhere in British Columbia, offers good and certain money. I know one man who owns three teams. He ships his outfit up north every spring when work opens up, and drives one of the waggons himself. Each waggon brings in £2 a day. Paying his teamsters the standard wages, feeding his horses and himself, costs less than £80 a month, and thus he has £75 a month clear profit. In the winter he works his teams, being content with less money, and having to meet the heavy expenses of stabling; even then he makes £30 and £40 a month profit out of them without having to work himself. Such a man has at least £500 a year clear to use either in investment or speculation.

One of the great men of the Pacific coast began in waggons. His brother had got him a storekeeper's job on the Canadian Pacific Railway at £12 a month. Not seeing any prospects ahead, contrary to his brother's

advice he quitted the Canadian Pacific Railway and started in with two waggons. Subsequently he took on a contract to feed 10,000 railway labourers. So well did he do his work that his employers asked him to "come in" with them, and to-day he has a salary of £6,000 a year, and an interest in their business. Apart from this, his investments in good Industrials make him a really rich man. I have mentioned this man because he hates and deplores the real estate game, and leaves it entirely alone.

Several minor successes occur to me. A gardener, who came out without a penny, put up a small greenhouse on a lot, and used to collect his own firewood on the beach. To-day he has four acres under glass, and is the owner of the property in England on which he worked as a labourer. Another man, after knocking round for some years, waiting in restaurants, painting houses, and working on the railway grade, came down to Vancouver one winter with £50. He happened to be lodging with a widow who had a small rig, and peddled eggs and butter. He bought the goodwill of the widow's little business, and added the further attraction of butter-milk. That night he went out and captured the trade of a whole and important street. In less than a year he had men working for him, eight rigs on the road, and a clear income of over £3,000 a year. The only worry he has is to get hold of enough "dope" to sell.

A surveyor who came to British Columbia and did not fancy spending three years of his life working "under wages" to qualify himself to practise, had a rough time of it till he fell on his feet. To-day he is a leading

importer of machinery, and in conjunction, has a splendid engineering business. A young London draper, who did rough work in the field during the summer, and mixed concrete in the streets in winter, snapped up a diamond drilling contract. He had only £40 in the world, and not the faintest knowledge of the work; but he tried and succeeded. To-day he has three diamond drill plants, and is the diamond drill man of the country, and in addition he has a ship of his own freighting on the inland waters.

In freighting, fishing and other fields, the chances are as good to-day as they have been in the past. One man I know, freighting between the islands, paid for his motor-boat (£1,000) and was £200 to the good at the end of his first year. Another man, who had earned his living as a labourer in British Columbia, went in with three others and paid £700 for a motor-boat and fishing gear. They fished for one of the canneries up north. The result was that his share for six months' work came to £800, and he was able to take a trip to his home in eastern Canada and secure finance to go in much bigger.

These successes are all outside real estate, and bear out what I say in the Introduction, that there is more money, and certain money at that, in Industries. However, building up a business means real work, great self-denial and many hardships.

Before leaving this chapter, I must mention one man who to-day is a respected member of the Provincial Parliament, and interested in mining and several successful enterprises. I will not call him by his true name, but give him the name of Miller. He

had a big hay meadow in the Boundary country a very long way from the railway, and went in for dairying. Early every morning he drove his cart containing the milk-cans to the siding, and got back late at night to his evening's milking. Passing the school on his journey home just after dusk, some children called to him to give them a lift. He asked them where they wanted to go, and they said to Miller's ranch. He enquired whose children they were, and they said they were Miller's children. I tell this story to show that effort and industry, even if they mean hardships at first, are sure to win out and be rewarded by ultimate success.

CHAPTER IX

LAND, HOW ACQUIRED, LAWS, TAXES, AND FARMING

With its mines, forests and fisheries, and the extensive railway building in conjunction with their development, as well as the railway undertakings in progress for carrying off the wheat from the greater part of the grain-growing area of the prairie provinces of western Canada *viâ* Pacific coast ports and the Panama Canal, British Columbia has become essentially an industrial country, and farming so far has occupied a position of relatively minor importance. Yet, with a population of less than 400,000, the country annually imports, roughly, £3,000,000 worth of foodstuffs. The opportunities, therefore, in farming are immense. Some of the figures of the imports are of interest.

	£
Horses (mostly of a heavy type) .	260,000
Beef, cattle and frozen beef . .	140,000
Sheep for slaughter and frozen mutton	200,000
Poultry (live and dead) . .	220,000
Eggs	200,000
Hay	600,000
Various pork products . . .	200,000
Grain (wheat, oats, barley) . .	400,000
Milk	80,000

	£
Cheese	140,000
Butter	200,000

These importations are likely to increase, as industries are making far greater headway, and will continue to do so, than agriculture. I think that grain will always be raised cheaper and to better advantage on the prairie than it will in British Columbia, but there is no reason why all the other products imported should not be raised in the country.

The conditions of British Columbia are so varied that one must thoroughly grasp its geographic and economic features before formulating any plans for farming. The coastal belt is dense forest, and the land has got to be cleared. By the coastal belt I mean Vancouver Island, the Queen Charlotte Archipelago, the Chain of Islands, the narrow fringe of land between the Cascade (Coast) Range and the sea, the delta of the Fraser, and the valley of the Fraser (including its tributary, the Chilliwack), up to the canon at Hope. This part of British Columbia has, where the rainfall is not excessive, and where the mountains shelter the land from the Pacific gales, the ideal climate of the temperate zone—the winters of southern France, the summers of northern Norway. The rest of the country between the Coast Range and the Rockies has a continental climate. Hot summers and reasonably cold winters in southern British Columbia. In northern British Columbia the winters are not excessively cold, and the summers not sufficiently hot to ripen cereals or roots ; thus, in spite of the generalisation of Professor

Macoun, which is quoted in all the Government pamphlets, it is entirely a country for raising stock or hay. In southern British Columbia I can never see how it would pay to clear land. There are, roughly, 20,000 square miles of desert country (naturally cleared land), which under irrigation or dry farming produce wonderful results. It is in this district that fruit growing has been practised, and the success of several fruit-growers has been used by the real-estate men as a basis for the creation of values, and their artificial enhancement. This desert district is a beautiful one ; sport is good (good fishing and good bird shooting) ; communications, thanks to the Canadian Pacific Railway, are increasing rapidly, and there are exceptional markets in the various mining camps. The population is essentially British ; the richer people ranging cattle, and wintering them off the hay they put up on their bottom lands, the smaller people growing potatoes and going in for mixed farming. All the land worth having has been alienated from the Crown and is privately owned. The prices vary very considerably. No one can expect to buy bottom land in the raw under £8 per acre, good undeveloped bench land under £6 per acre, and sidelong ground under £3 per acre. Fancy prices have been paid by rich men for ideal sites.

The scenery, its mountains and its lakes, make this district an ideal place to settle in, and several colonisation companies are in the field. I mention two, both English concerns, that are likely to be successful, the Canadian Pacific Railway's property on Windermere, and Colonel Morgan's colonisation scheme on the east end of Nicola Lake. I should not advise any newcomer to



Photo by courtesy of Can. Pac. Ry.

LAKE WINDERMERE IN THE KOOTENAYS

settle on the Okanagan Lake, as prices are altogether absurd, improved land fetching as much as £60 per acre.

Along the route of the Canadian Northern Railway, a small amount of good land on either side of the North Thompson River is still to be got hold of at reasonable prices, and there is quite a lot of good land round the little town of Lilloet, which promises to become a mining centre.

The land in the Kootenays and on the eastern slope of the Cascade Range, with the exception of the natural hay meadows, calls for clearing, and I cannot see how it will, at present, pay to clear, even if it is obtained at the bedrock price of second-class Government land (£1 per acre).

In the northern interior, between the routes of the Grand Trunk Pacific and the Canadian Pacific Railways —New British Columbia, as it is called in the Government pamphlets—(Official Bulletin, No. 22)—there is the great grazing area of the Chilcotin Plateau, and hundreds of natural hay meadows along the small streams and at the outlets and inlets of the smaller and larger lakes with which the country abounds. By far the greater portion of the northern interior is open forest country with no undergrowth, which will feed about one head of stock to 20 acres for about nine months of the year, while the hay meadows serve for winter feed. There are isolated patches of alkali ground where nothing grows; however, these have been found, when laid down to the Siberian brome to yield 3 tons of hay to the acre and more. The chance, therefore, in the northern interior is essentially stock. I am personally acquainted with one man, who, going

out to British Columbia twelve years ago, and taking up the breeding of heavy horses, has, with an original capital of £4,000 acquired over 200,000 acres of grazing land (independent of his open forest range, which he uses and for which he pays nothing), and whose income is now £18,000 a year, and likely to increase. Another man I know, starting with a small store, and virtually no money, along one of the main roads, has acquired 40,000 acres of land, and has already 800 head of cattle ranging on it.

There is more in the northern interior than even the local people think, for not only will owners of property sell at reasonable prices and on long terms (many of them want to get out and enjoy the ideal climate of the east coast of Vancouver Island), but the amount of Government land still to be obtained is enormous. It was the alienation policy which really started British Columbia going, and the detractors of McBride made out the Government have alienated the whole province, whereas they have alienated far less than people realise. I myself went "landstaking" in a part of the country which has now been placed in reserve for pre-emptors only, and found hay meadows varying from 30 to 300 acres within a few miles of a main road. These hay meadows were then waste lands of the Crown, and could be acquired on the easiest terms at £2 per acre. I would mention that, given a 300 acre hay meadow, and a reasonable amount of range in the open forest country, a man with adequate capital to buy cows, etc., could at the end of three years have a permanent income of a net £1,000 per annum. He could do equally well in sheep or horses, for with the

exception of a few coyotes (wild dogs), which are easily shot or poisoned, there are no wild beasts to contend with. Although I only saw some of the smaller hay meadows, I have information of hay meadows up to 7,000 acres in area within twenty miles of probable railway routes that are still waste lands of the Crown, and can be acquired at a virtually nominal cost.

Before dealing with farming on the coastal belt, I give, roughly, information how land is acquired from the Crown. The Government have ceased selling timber land or granting leases of timber, but they permit *everyone in any part of the world* (provided they are white), to obtain lands under the following conditions :—

(1) Pre-emption.
(2) Purchase.
(3) Lease.

(1) *Pre-emption.* To pre-empt, a stake must be placed at one corner of the land to be pre-empted. A fee of 8*s*. must be paid to the nearest land office for recording the pre-emption. The pre-emptor must live twenty months out of two years on the property (he can always obtain leave for eight months and more, if he has a reasonable ground for absence), and do improvements to the value of £80. If the land has not been previously surveyed, he must bear the cost of survey (from £10 to £40, according to the distance the surveyor has to travel, and the amount of work the surveyor can find in the neighbourhood). At the end of two years, he must make a payment of £8 to the Government, and he then owes the Government £24.

When he pays this £24 off, the Government grant him the land in fee simple. During the time he is pre-empting he pays no taxes whatever, and after he has his title, his taxes roughly amount to 16*s.* per year. The area of a pre-emption is 160 acres.

On the whole, pre-emption has been a failure, the average pre-emptor having made use of the ideal terms granted by the Government merely to acquire land, with the object of selling it again. It is greatly to be regretted that many pre-emptors hardly spend a month on their pre-emptions, and only go on the land to do the necessary improvements to get their titles, and they wilfully perjure themselves in the Government land offices, swearing that they have fulfilled the residential conditions. I mention this fact to enable a *bonâ-fide* settler to get hold of a pre-emption which is being " boshed " if he desires it, for the Government land commissioners are invariably good chaps, and will, for a settler who is in earnest, put themselves out to " chase " a bogus pre-emptor (*see* page xi).

(2) *Purchase.* Land may be purchased from the Government of British Columbia in blocks of from 40 to 640 acres by any one individual. For anyone wishing to acquire larger areas, it would be necessary to get one or more friends' powers of attorney to purchase additional blocks of 640 acres, and subsequently get the titles transferred to the purchaser's name. In purchasing land, a stake has to be planted at one corner of the block desired, marked with the initials of the intending purchaser and the date, and the intended purchase has to be advertised in three successive *Government Gazettes*, and in one of the local

papers as well (the total cost of this is £2 16*s*.). At the expiration of sixty days, if no *bonâ-fide* objections are put forward against the purchase, the applicant pays a deposit of 2*s*. per acre, and the Government of British Columbia record it on their maps with more or less accuracy as to location, as "an application to purchase." The cost of Government lands is £1 per acre for second-class lands, and £2 per acre for first-class lands, the classification being made by the surveyor. Natural hay meadows are invariably classed as first-class land, otherwise the surveyors describe land almost invariably as second-class.

The Government, being in such a strong position financially, are very easy about the instalments, whether they are forthcoming or not, provided that interest at the rate of 6 per cent. is annually paid on the balance due.

As I said before, pre-emption is a failure, but land purchase is not. I would illustrate this. Supposing a man decides to take up a square mile or section of land, his trip to find the land will cost him, say £20; his advertising and incidental expenses on his visit to the local land office, say £5 all told. Two months later he pays £64 to the Treasury. This gives him the right (subject to paying his annual interest, which is £72) to use 640 acres of land for his own benefit. If he either goes to his property or sends people there, his taxes would amount to less than £6 per annum. The Government, who are very good about roads provided people do not go too far ahead of developments, will employ both himself and his people to make a road to the property (once they are convinced that he is in

earnest, and not a land speculator). Thus a settler, if he possesses a waggon and team, can find his own food, feed his team, pay the interest on his instalments and the taxes due, by three months' actual road work in the year, and be able to devote the remaining nine months of the year to his farm.

Many people who desire land ahead of developments, however capable they may be, either as farmers or business men, are absolutely lost when they try to get about country, and it is to their advantage to employ a trained explorer to select land. There are several of these trained explorers in British Columbia, who make their living entirely by doing this work. They charge from 1*s.* to 4*s.* an acre for selecting land, arranging the advertising, filing the applications to purchase, and making every preparation for the intending settler to start in. I myself shall be returning to British Columbia shortly, and if my work in the field permits of it, I shall have no hesitation in "staking" land for anybody who wishes me to do so, and I ask anyone desirous of acquiring land, either for actual settlement or for investment purposes, to write to me at the address given in the Introduction.

In purchasing land, it pays every time to do some development work. Improvements reduce the taxation to three-fifths of 1 per cent. on the valuation, and there is an additional reduction for the homestead. If no improvements are made, the Government demand a wild land tax of 4 per cent., and this tax, which comes very heavy, is in danger of being increased, for it is rumoured that the Government intend to enforce development by increasing the wild land tax.

I had better illustrate this taxation from my own case. The year before last, with another man, I bought 270 acres of natural hay meadow at £2 per acre. Our taxation was £22 per year. Last year I went up there with my partner, put up a log house with a roof of split cedar (materials to be found on the property), dug 2,000 yards of ditches, completely draining the meadow, and our annual taxation was reduced in consequence, from £22 to £1 16*s*. The cost to do all this work was well under £100. Incidentally I might mention, having done our improvements, we sold the property at 300 per cent. profit, and it is very likely that in a few years it will change hands for two and a half times the price for which we sold it, as a good hay meadow, laid down to cultivated grasses, produces two to three tons of hay an acre. Hay varies in price from £4 2*s*. 6*d*. per ton to £8 per ton. However, it is far more profitable—but this needs capital—to feed it off to stock on the ground.

(3) *Lease*. Although land is leased under various terms in British Columbia, the only two that concern the agriculturalist are cattle range and hay meadows. Range can be leased for a period of twenty-one years in blocks of 640 acres by any one individual. To obtain larger areas, it is necessary to get powers of attorney from friends. Hay meadows can be leased for a period of ten years only, but it is far better in every case to purchase hay meadows rather than lease them.

So far I have ignored the farming possibilities of the coastal belt on account of the problem of land clearing. In the first place, most of the land that is any good has

got into the hands of private owners, and where there are both communications and markets, the prices asked are decidedly high. It is the game of "selling climate," and in some cases the prices are absolutely justified, for they will both be maintained and increased.

In the case of the delta of the Fraser and the Fraser Valley up to the canon at Hope, also including the Chilliwack Valley, there are 400,000 acres of probably the very best land in British Columbia. In the delta itself the clearing is fairly easy, but the land requires dyking, and this has already been effected in some parts by means of loans. The crops they grow on this land are simply marvellous, hay sometimes running four tons to the acre. This, year in and year out, without the aid of manure, for it is possible to open the sluice-gates and let the Fraser deposit the mud it carries in spring over the land. Up the valley the land is dry, but it is all sub-irrigated, water being obtainable by sinking eleven feet anywhere. The cost of clearing under the present conditions should not exceed £28 per acre, and should be less if really efficient labour is employed. The communications are the main lines of the Canadian Northern and Canadian Pacific Railways, the British Columbia Electric Railway from Vancouver to Chilliwack, and the river steamers on the Fraser itself. It is the immediate *Hinterland* of Vancouver. The markets are Vancouver and the cities on Burrard Inlet, New Westminster (the former capital and a city of 25,000 inhabitants) on the Fraser, Port Mann (the terminus of the Canadian Northern's Transcontinental system), opposite New Westminster, Steves-

ton (the fishing town at the mouth of the Fraser), all of which one day will grow into one vast city of probably a million or more inhabitants.

The other area, the *Hinterland* of Victoria, having communications and access to markets, is the Sannich Peninsula and the strip of land between the mountains and the sea on the east coast of Vancouver Island, two to seven miles wide and 140 miles long, extending from the Sannich Peninsula to the mouth of Campbell River. This bit of country I have no hesitation in authoritatively describing as the ideal climate of the temperate zone. The rainfall is about 26 inches ; the summers, with the exception of a little rain in June, are invariably dry ; there are no high winds, and thunderstorms are virtually unknown. With the exception of isolated hay meadows, which can be drained, patches of alder bottom, which can be slashed for about £3 an acre, patches of crab-apple, which can be cheaply cleared, rock and poor timber, which are worth nothing, the whole of this area is big timber, which, under present methods, costs from £40 to £100 an acre to clear. The markets are the coal mines at Cumberland and in the Comox Valley (Tsolum River), at Nanaimo, Wellington and Ladysmith ; the sawmills at Chemainus, Ladysmith, Nanaimo and elsewhere ; the logging camps on the Cowichan Lake, Nanoose Bay, at Headquarters (near Courtney in the Tsolum River), and at Campbell River, and several other smaller ones which shift their ground from time to time ; the towns are Victoria, Sidney, Nanaimo, etc.

Similar conditions prevail on that part of the Chain of Islands which is sheltered by Vancouver Island, and

on the narrow fringe of land on the Continent between the Coast Range and the sea.

On the west coast of Vancouver Island, the west coast of the Queen Charlottes, and the west coasts of the Chain of Islands north of Vancouver Island (except in isolated cases, the result of geographical conditions), although the climate is neither rigorous nor continental, there are heavy winds and an excessive rainfall. I think farming schemes in such localities are out of place in the present stage of development.

On the east coasts of the Chain of Islands and the Queen Charlottes, where there is good land, especially in conjunction with the development of the fisheries, there are good opportunities for land settlement. A great deal of the land can still be obtained at bedrock prices, and I am prepared to put up to any London financier a sound colonisation scheme in conjunction with the development of the coastal belt of northern British Columbia—a scheme which will be based on improved methods of land clearing, harvesting the wealth of the sea, and inaugurating a motor-ship service with bases at Rupert (the terminus of the Grand Trunk Pacific) and Skidgate (the headquarters of the British Columbia fisheries).

In concluding my chapter I feel I have said too little about actual farming, but I want to impress on everybody the following facts :—

Hay, the lazy man's crop, pays hand over fist.

Mutton and wool offer splendid opportunities, as wild sheep and goats are indigenous to British Columbia, and Canada has 8,000,000 people and less than 2,000,000 sheep.

Beef offers 40 per cent. on money at the end of three years, as well as an increasing capital and increasing income.

The supply of eggs and poultry will never equal the demand. Independent of his other enterprises, one man I know, with 1,500 head of poultry, which he runs on forty acres of cleared land and 120 acres of woods (forest), is receiving a net income from them of over £600 per annum.

Dairying is better in British Columbia than in England, for in the cities milk costs more than beer, and is retailing at 3½*d.* a pint in Victoria.

Potatoes, always the poor man's crop, are more prolific in British Columbia than in England, and fetch from £5 to £7 per ton (they have fetched as high as £13 a ton wholesale). The crop is always a certainty, as so far there has been no disease in the country.

I think that anyone will agree with me when I say that, by itself, fruit (in spite of the " boost " the books give it) is foolishness, and that mixed farming is the game. This, on the coastal belt, necessarily depends on a well-conceived scheme of land-clearing and finance.

CHAPTER X

LAND-CLEARING AND FINANCE

Of the various enterprises with which I should like to associate myself, I think the one which would do most good to the whole colony, is a sound scheme of land clearing. The capitalised annual loss to the province of British Columbia for money sent away to purchase foodstuffs, working it out on the present figures of importations (£3,000,000 a year), is £60,000,000—more than the wealth of the Kimberley mineowners ; and if industrial developments continue, as they promise to do, this capitalised loss will probably be a very much greater one.

In no country of the world are the local markets for agricultural produce better than they are on the coastal belt of British Columbia, and yet thousands are deterred —despite the growing facilities of communication developed by the McBride policy of road-making and railway building—from starting in to farm, because of the initial cost of clearing land, and because without large capital it means almost a life's work to get a place into shape. At present there is no help given to clear land, nor has there been any serious investigation of methods and costs. The great carrying companies, whose future freights depend largely on land settlement, have gained no knowledge of what price land

can be cleared for. Arbitrary statements, such as was made by the president of the Victoria Board of Trade at the 1912 Forestry Convention—that it cost from £60 to £80 an acre to clear land—are not only untrue, but are most damaging. Equally damaging are the statements that the sale of the timber will pay for the cost of clearing land. The farmer is not a lumberman nor can he market his timber. He can only clear land by the most elementary and rudimentary processes, which are both tedious and slow, and greatly enhance the cost of the work.

In the older settled countries, the generalisation that conifers (fir trees) grow on poor land, and deciduous trees on rich land holds. Such is not the case on the coastal belt of British Columbia, for with the exception of a certain amount of maple in the lower Fraser Valley and isolated patches of alder, crab-apple, willow and poplar on the various islands, the whole coastal belt is one vast forest of conifers. I have seen any amount of good land covered with " cedar " and spruce, and I have also seen (but to a less extent) Douglas fir and hemlock growing on good land. Of course, the reason why land is not usually good in a fir forest is because the pine-needles " poison " it, and also because there is little or no humus as the annual fall of leaves gives to the soil of a deciduous forest. However, the want of humus is quickly remedied by putting cleared land down to grass, and replacing in the soil any salts that have been removed by the growing timber. This is evidenced by many prosperous farms (all made out of a fir forest), on the east coast of Vancouver Island and the islands in the Straits of Juan de Fuca and the Gulf of Georgia.

Another point that has to be considered in a land-clearing scheme is the rock formation in the areas to be cleared, and this must, except in exceptional cases, be sedimentary. By this, I mean you will have to cut out practically the whole of the coast line, with the exception of isolated patches on the Chain of Islands and at the heads of the fjords where rivers come into them. This leaves us with the valley of the lower Fraser, practically the whole of Vancouver Island (leaving out what is mountain and what is rock), and a small part of the Queen Charlottes. (*See* Geological Map.)

The next step in considering land clearing, is to define the exact areas having access to markets that should be cleared. The larger areas I should define as under :—

(1) The immediate Hinterland of Vancouver.

(2) The immediate Hinterland of Victoria.

(3) The country from which Prince Rupert and the adjoining mining and fishing centres (Stewart and Skidgate) must draw on for labour and supplies.

The smaller areas I would define as :—

(1) Suitable areas on the Chain of Islands.

(2) Suitable areas at the mouths of rivers on the coastal belt.

(3) Areas round sidings on the railways that are now constructing on Vancouver Island, as well as areas round logging ports and probable fishing centres.

In my previous chapter, I have already described the immediate Hinterland of Vancouver and Victoria, the former giving an area of 400,000 acres to be cleared

straight off the reel, and the latter 100,000 acres to be cleared as the forest is cut off.

The country tributary to Rupert, and the adjoining mining and fishing centres is the seaboard of the east coast of the Queen Charlotte Archipelago and Porchier Island, and one or two of the adjoining group in the Chain of Islands. The timber is of a far lower value than that of Vancouver Island, but a great deal of it merchantable.

The first step, in all land-clearing operations, is to split any stumps over 1 foot 6 inches in diameter with powder. This costs, including labour, from £4 to £7 an acre, and this figure cannot be reduced except by reducing the cost of explosives. The next process is to pull the stump or split stumps out of the ground. This is easily managed either by teams and tackle, or by one horse and a stump-puller ; there are two local firms making stump-pullers, and they sell about 300 of these each year (which cost with hawsers from £20 to £40 apiece). The trouble with both these methods is that the operations of pulling the stumps and gathering them into heaps are not continuous. In land-clearing operations in England, they use traction-engines—one can do anything with a Fowler's B5 road loco. with a crane attachment—but I doubt if it would be practicable, at present, to use them in British Columbia, because the bridges on the roads are not constructed to carry them. Methods based on turning the stump into charcoal, such as charpitting, and burning it out on the ground, are only practicable on a clay soil, and I doubt then if they are economical. There remains only the hoisting engine of the country

(the " donkey " engine) which will pull and pile in one operation. And " donkeys " are invariably employed on all big land-clearing work.

While in British Columbia, not only did I do some land-clearing work myself, but I made a point of studying land-clearing whenever I got the chance. The following costs and figures are the result of my observations. I found that, including the wages of the powderman, it costs from £4 to £7 an acre to split the larger stumps.

No matter whether the timber was large or small, and how many rotten logs or small standing trees were on the ground, it averaged 660 pulls to pull and pile an acre.

The maximum efficiency was gained when the pulling to the pile was from 200 to 250 feet, *i.e.*, the maximum efficiency being gained by clearing four acres with one rigging of a pole.

A 45-h.p. double-drum " donkey," with a crew of seven men, costing £6 a day, can pull and pile split stumps at the rate of thirty-three pulls an hour, and thus clear an acre in two days of ten working hours each.

It costs £2 to £4 an acre to fill up holes and gather small stuff by hand into piles for burning.

The actual cost of clearing, therefore, worked out from £18 to £23 an acre, but, adding delays in rigging poles, removing rigging, getting on and off the ground, and adding interest and depreciation of plant, the true cost, without the contractor's profit, would come from £23 to £28 an acre.

These figures apply to the clearing of blocks of not

less than 30 acres in area, and are based on employing only highly efficient (and consequently well-paid) labour.

Now it is evident that in a well-conceived scheme of land-clearing, these costs, by various improvements, could be considerably reduced.

The first that struck me was, that instead of one drum of the "donkey" pulling and piling, and the other hauling back, both drums should have been pulling and piling, and that the hauling back should have been done by two small (1-h.p.) portable oil hoisting engines. By such means the duties of a rigging slinger and a signaller would have been obviated, and at the expense of an extra hook-tender and his assistant, and two men to attend to the two small engines —an actual extra cost of less than £2 a day for wages and oil—the efficiency of the donkey could be doubled. I also saw that an oil-hoisting engine (donkey) was better than steam, because there would be no danger of breaking hawsers, and also that it was easier to get about. Two other points struck me: one was the devising of a simpler and quicker method for rigging a pole for piling, and the other was some equally simple method of releasing the rigging. And, as a final improvement—good as the self-releasing choker was—some quicker and better method could be devised for hitching on to stumps.

If, by efficiency and improved methods, the cost of clearing an acre of land can be made less than its selling price cleared, it is obvious that land-clearing will pay. Opportunities and absence of co-operation cause local money to be used entirely in speculation

and in business, and not as loans on the security of farms. Few farmers have enough money to pay for land-clearing, and those who have are too prone to use if for speculative investment in land ahead of developments. My idea is to try through London to start a land-clearing scheme, which will virtually be loaning money on the security of improved farms, and making money as well out of efficiency in contracting.

To accomplish this it would be necessary to get specific legislation passed by the British Columbian Parliament, as well as to get the Parliament to guarantee the interest on a loan, in order that money could be lent at the lowest possible rates to farmers. With regard to the specific legislation there would be no difficulty, as the McBride Government are heart and soul committed to a policy of settling up the country. I do not think that, if approached by serious finance, there would be any difficulty in getting the Government guarantee for a loan.

The next step would be to define the areas to be cleared, and to enquire into what methods would be most applicable to each area. In the larger areas heavy machinery and efficiently-drilled workmen would necessarily be employed, and the work would go on without intermission. By this I mean that, if there were any delay in shifting from one farm to another, the company would at once put its plants and men to work in clearing land which they had previously purchased, and laying this land down to grass (thus making it earn money) until such a time as they could sell it. In the smaller areas a small machine, which could be worked by three men, and easily moved from place to

place, could be employed. I have myself designed a machine which will pull and pile in one operation and which weighs about 36 cwt. To determine the exact type of machine or machines to be used in the larger areas it would be necessary to scrap say £10,000 in actual experiments, using the data I have given and the data obtained by Messrs. Fowler, of Leeds, who some years ago cleaned up some 25,000 acres for the Duke of Sutherland in Scotland.

The finance itself is simple, provided the Government make it easy by guaranteeing a loan to be used for lending money on cleared land. Having got the guarantee, a company would need less than £50,000 working capital, which would be used for paying wages, buying plant, and purchasing small parcels of land from time to time.

As agriculture has already got very far behind the industries, and with the prospective developments will be still further behind, I hope this land-clearing scheme of mine will commend itself to some London financier.

CHAPTER XI

PROSPECTIVE DEVELOPMENTS

Of the immediate developments, interest will centre less in the building on the mainland of branch lines from the three trans-continental systems, than in the creation of two systems of railways on Vancouver Island. The credit of the island railways is entirely due to the Premier, Sir Richard McBride.

After Dunsmuir had built the Esquimalt and Nanaimo Railway, with the exception of Jim Hill's rotten railway between Victoria and Sidney, and the tramway service in Victoria established by the British Columbia Electric, no railway work of importance was done on Vancouver Island. The Esquimalt and Nanaimo Railway, of which in the old days great things were expected, carried a few passengers between Victoria and the little settlements en route to Nanaimo its other terminus, seventy-three miles off. It carried very little coal, as it is always cheaper to bring the coal down by sea. The Canadian Pacific Railway bought it together with its land grant, and carried it from a point north of Nanaimo to the head of the Alberni Canal. They also put on sixty logging trucks, so that the timber away from the sea could be brought to the sawmills. They established a ferry service between Vancouver and Ladysmith to enable goods to be



VANCOUVER ISLAND AND ADJACENT MAINLAND

shipped into Victoria from the interior of Canada. The Canadian Pacific Railway, in spite of their aggressiveness in pushing their present business, unlike the Canadian Northern Railway, who are in all sorts of developments ahead, do not build extensions unless they can see freights. Consequently there was little chance of the Esquimalt and Nanaimo Railway being carried on to the north end of the island. The Premier, when he guaranteed the Canadian Northern's bonds to enable them to build that part of their transcontinental system which lies in British Columbia, stipulated that Mackenzie and Mann should build through Vancouver Island. This forced the Canadian Pacific Railway to extend the Esquimalt and Nanaimo northwards, as they could not afford to be behind their younger rivals. To further help both companies, the Government selected a National Park in the centre of the Island.

This National Park is to be the playground of the Pacific. It encloses Buttles Lake, the head-waters of the Campbell River, the largest river in Vancouver Island. Two roads are being constructed through the forest to the park, one from Duncan Bay, where the main road terminates in a little harbour two miles north of the Campbell River, and the other from Alberni, passing Sprout Lake and Great Central Lake. The completion of these roads will enable visitors to make a motor-car trip from Victoria through country of unrivalled scenic beauty—glaciers, mountains, lakes and forests such as the world has never seen before. Everything in the vicinity of the park is remarkable. The Campbell River, which teems with trout, flows

through a chain of lakes whose beauties rival those of Switzerland. Five miles from its mouth it is a big river, breast high, 300 feet wide and running strong. Then it suddenly narrows to a little ditch of 22 feet wide, which it has carved out of the rock, and jumps over an escarpment of 140 feet, giving the effect of a Niagara Falls in embryo.

I cannot leave this river without bringing in the jarring note of commerce. These Falls on the mean summer flow of the river offer 80,000 h.p., and in the course of all my wanderings I have never seen a water-power so easy to in-span. At the moment, it is hard to see how the full value of these Falls can be made use of. True, they could run the whole island railways, but that is too far ahead of developments at present to think of. They will certainly be used to work the three big saw-mills that are going in at Duncan Bay when the railways get there. The question whether factories will be located near can be simply answered. Such developments will depend on Yankee or coast enterprise, for the Britisher and eastern Canadian is generally too conservative and short-sighted to look ahead. Unfortunately smelting iron by electricity is barely on a commercial basis yet ; should it become so —and I look to the discovery being made shortly— it will mean the possibility of establishment of an iron industry in the British portion of the Pacific Coast.

An iron industry is badly needed in the West. Every year the Pacific Coast from Chili to Alaska is importing over £25,000,000 worth of steel rails, structural steel, etc., and annually spends £4,000,000 on freighting

these materials from Europe and the eastern states of America. In Chili there is good hematite and coal in close proximity to one another, and French financiers are investigating the possibilities of starting an iron industry there. On the Pacific seaboard of the United States there is neither coal nor iron. All their coal they buy from British Columbia, and several of the great Canadian fortunes on the coast have been built up by selling coal to western America. When the Americans built five battleships in their Navy yards at San Francisco, they got their iron from Texada Island, one of the British islands in the Gulf of Georgia. This ore was a very pure magnetite, but it is a comparatively small deposit. The "impressive" deposit of magnetite is near the National Park, in the basins of the Campbell and Quinsam Rivers, and about twelve miles in from the sea. Near the upper Quinsam Lake, this body of magnetite is about two miles wide, and recently 130 feet was driven in pure iron ore, the assays showing neither phosphorus nor sulphur.

In the Government handbooks several iron deposits are described, and although there are mentions of discoveries both of hematite and limonite, I am inclined to discount the commercial possibilities of all except the Campbell River and Quinsam deposits of magnetite, and a unique deposit of bands of iron ore alternating with bands of limestone near the west arm of Quatsino Sound. This latter ore, containing as it does its flux mixed with it, and being in immense quantities, might well repay serious investigation.

What will undoubtedly hold back the immediate development of the Campbell River and Quinsam

deposits is the fact that, although there is plenty of coal in the vicinity, none of the coal is of a good coking kind. Of course if the electrical smelting of iron had been worked out on a commercial basis, there would be no trouble to start the industry going, as the Campbell River Falls would furnish all the power needed.

In practice the iron ore must be carried to the coal in order that the process of smelting may be most economically carried out. The only coal fields that will produce a good coking coal are situated in the vicinity of Kuldo, fifty miles north of Hazelton and one hundred east of Stewart, at the head of the Portland Canal. The geological formations in the Campbell River district and in the vicinity of Kuldo show a certainty of good flux being discovered, so the question of fluxes is not worth my while mentioning.

In Puget Sound, near Seattle, an attempt was made to establish an iron industry on the Pacific Coast. It failed for two reasons. One was the economics being wrong, the iron and coal being carried to a point where neither of them existed, and also because the octopus of the Steel Trust in the United States bought up the debts of the business, and forced the promoters of it into liquidation.

As the manufacture of iron has such an important bearing on the future of British Columbia, I feel that the best way to enable the business to get started would be for the Government to directly subsidise the enterprise, as the Dominion Government have already done in the case of the production of lead and other commodities in Canada.

To return to the railway development on Vancouver

Island. In the accompanying map I have put the routes to be followed by the Canadian Pacific Railway and Canadian Northern Railway with a fair degree of accuracy, having served on the staff of both companies. It is evident that both the Canadian Northern and Canadian Pacific must make some effort to off-set the advantage gained by the Grand Trunk, as their port of Rupert is so much nearer the east than Vancouver. By running their lines to Quatsino Sound and connecting by ferry with Vancouver, the Grand Trunk's advantage of 473 miles to Asiatic ports is reduced by nearly 300 miles. This will mean the establishment of a city of some great importance somewhere at the north end of the island. Exactly where this city will be it is hard to say, and I do not feel justified in giving away my information, or indicating where I am told it will be.

The actual points on Vancouver Island of connection by train-ferry service with the terminals of the Canadian Pacific Railway and Canadian Northern Railway will be at Nanoose and Ladysmith, on the east coast, and Union Bay in the Sannich peninsula.

The desire of all the inhabitants of Vancouver Island is to get a railway constructed from the three converging systems of the Yellow Head Pass, and to carry it from Tête Jaune Cache to Soda Creek on the Fraser, from whence the waterway is navigable for 1,000 miles northwards, thence through the great grazing area of the Chilcotin, thence sixty miles through the Cascade Range to Waddington Harbour, at the head of Bute Inlet. This was the original intended route of the Canadian Pacific Railway, and was abandoned on account of the expense of getting through the Cascades.

The route is 500 miles long, and 450 miles of it is through easy rolling country, through which railways can be constructed at £7,000 a mile. The cost of the sixty miles through the Cascades has been estimated at from £25,000 to £40,000 a mile, and the distance of heavy work at sixty miles. Such a railway would cost in all less than £6,000,000.

The best interests of Vancouver Island would be served by not letting it be constructed by any one of the three great carrying companies. The object of every-one on Vancouver Island is to get entirely independent finance to construct this railway, and allow the three carrying companies to have running powers over it. In order to facilitate the financing of this scheme the Provincial Government would undoubtedly guarantee the bonds, and a liberal subsidy, probably £1,500 a mile, in cash could be expected from the Dominion Government. It is now a matter of less than two years before the two island systems will both be running into Duncan Bay, and a ferry connection can then be made to the head of Bute Inlet. Later on, the railway after its construction can be carried to Frederick Arm. Between Frederick Arm on the mainland and Elk Bay on the island is a clear water passage of fifteen miles. Elk Bay is twenty miles north of Duncan Bay, and can be easily connected with the island railway systems. When all this has been done and the traffics justify it, the dream of bridging the Seymour Narrows and the four other channels may come about, and the great railway systems be connected with the harbours of the outer coast of Vancouver Island—Canada's true western frontier.

CHAPTER XII

REAL ESTATE, SPECULATION, AND INVESTMENT

The main idea of both the English and American peoples is to "make money," and the only way to do this without speculation is to exploit the resources of the country—to win the wealth that the soil, the sea, and the forest offer. Once the great financial centres of the world are satisfied that the dormant wealth is there, they are prepared to negotiate communications. They then make the best bargains they can with the people of the country to establish lines of shipping and to build harbours and railways. This may be described as development. Development brings people to the country, and people have wants—food, firing, and lodging. Naturally these wants create values. The securing of the profit from those values created by others makes the real estate market, which is, perhaps, the most prominent feature during the early phases of a young community's life.

Selling real estate is the game of making "easy money." So lucrative a game is it that all through western America the real estate men dignify themselves as business men and describe their work as a profession. They have their real estate exchanges, their development leagues, their progress clubs, their great buildings with high-sounding names, and their trust companies—all designed to catch the investor's money and encourage

him to " make a first payment " on something in the hope of turning it over at an enhanced price.

A great deal of the real estate game is thoroughly legitimate, and many of the men in it are thoroughly honest, but by far the greater number are either ignorant or impossible optimists. The game offers splendid chances to swindlers. Once a boom starts, men come out of their barbers' shops, from pick and shovel work, from behind bars, and their numbers are augmented by many ex-gaol birds, who often succeed in persuading honest lawyers and statesmen to let them have a little money, and lend them the credit of their names. Very naturally the bankers, the great carrying companies, and the sound business men deplore real estate, as its whole effect is to enrich the men dealing in it, making it harder for everyone to live and leaving the country poor.

Only those who have seen and understood the real resources of the coastal belt of British Columbia, and the farming possibilities of its hinterland, Alberta, can truly grasp the future of real estate values. Personally, I do not like real estate, as it means " soaking " people instead of serving them, also because it keeps going a very large number of idle men, who are no good to the country. The defence of the real estate game is that it has the effect of getting the country filled with people who, as soon as values are sufficiently enhanced by discounting the future, have to find some other way of acquiring wealth. To some measure, the Canadian temperament is to be blamed for the excess of the real estate business. The Cannuck, though a better man morally and physically, has not the aggressive and

enterprising spirit of the Yank, or the American ability of combination. His money, which has been gained by effort, thrift, and great self-denial, he has often lost in enterprises of his own, due to "starting in" with insufficient capital. He has a boundless belief in his country's future, and almost childish exaggerated ideas of the wealth and folly of the English investor, and London's desire to develop his country. He naturally, if he has not enough money to buy forests, mines, and water-powers to re-sell, invests his savings and gains in land—preferably town lots and undeveloped acreage. The real estate broker takes full advantage of these Canadian failings, and encourages not true real estate investment, but gambling on the future. Very naturally, for there has been much money made at the game, there are far too many engaged in real estate, and the tendency to overdo a good thing already foreshadows the inevitable slump that has yet to come.

Personally, I do not like real estate, and on the preceding page I gave my reasons for my dislike of it. However, I have no hesitation of getting hold of inside property, which in many cities has far from reached its true value, and which can at once be made productive of revenue by the erection of buildings. As far as acreage and natural resources go, I should be very glad to get hold of, for myself or for others, anything which I knew must increase in value. But I would have nothing to do with high-priced farm land, poor timber, or the jungle of seemingly cheap lots laid out to "hell-and-gone" round every growing town, nor would I encourage gambling pure and simple.

It is very difficult to write about real estate. The Government were asked to censure real estate advertisements, and the Premier very wisely refused to do so, as it is almost impossible to draw a hard-and-fast line between legitimate optimism and plausible lying. About the safest investment in real estate is to make a first payment on acreage suitably situated, employ a surveyor to subdivide it into small lots as a town-site, or in blocks of five to forty acres for settlers and farmers, then, having registered the subdivision in the Land Registry Office, to hand it to the real estate men to sell on easy terms to their speculative clients. To do this honestly, one must have either a port, a mine, or block of exceptionally good timber close by, and know that the owners are in the way of getting money to develop their property. This game, of course, is played by the real estate brokers themselves, and they put some disgraceful things on the market, selling the lots to office boys, girl stenographers, and labouring men. A seaside resort was recently put on the market on the west coast of Vancouver Island. Now a seaside resort for western Canada is badly needed, but seaside resorts are not wanted in a part of the country that has nearly 100 inches annual rainfall, and whose beach is rarely uncovered, and whose surf is so bad and dangerous that it is impossible to effect a landing at any time. The gaudy pier promised (if money could ever have been got to erect it) would have been twisted into scrap iron by the breaking sea, and the possibilities of boating and swimming were non-existent, yet the proposition sold all round western America, and even in eastern Canada and England with

great success. The result is that a lot of poor people subscribed money which could have been used to far better advantage in legitimate enterprises, for money on first mortgage is worth 8 per cent., and any sound business will yield returns from 15 to 40 per cent. and even more.

Throughout my book I have endeavoured to show the true lines of development in order to guide others, but many of the places named are too far ahead at present to appeal to any but those who can afford to lock up money and wait. There is a simple formula, for arriving at the number of years required to double money :—seventy divided by the sum of the percentage wanted, added to a percentage of 4 per cent. to cover taxes and other outgoings. Thus, if one wants 8 per cent. for one's money, at compound interest it takes six years to double ; if 9 per cent., five and a third years ; if 10 per cent., four years. Of course, far quicker movements than this can be obtained if the investor acts on straight advice, by placing his money in Victoria, Vancouver, and its adjacent cities (New Westminster, Portman, Coquitlam, etc.), and the great northern terminus and distributing centre Rupert.

Vancouver has had its great move, and a large amount of it is now " up to building values," but as all the cities on Burrard Inlet and the mouth of the Fraser are destined to become one great city, with over 1,000,000 inhabitants, many values should continue to increase at the rate of 10 per cent. a year. Lots bought should not be allowed to be idle, and should be made productive of revenue by the erection of houses, or, better, flats, and thus earn 12 per cent. on

the whole investment, while the lot—it being assumed that the original price is "right"—would double in value in seven years.

This at once brings one into the field of speculative building—a very paying game. Houses, especially in Victoria, whose population has doubled in the last two and a half years, are badly needed. In speculative building the first requirement is to buy the lot and to own it in fee simple without encumbrances. Building is then an easy matter. Materials can be obtained "on time." Money is always available on first mortgage for payment of workmen and material. It is best to associate oneself with a working carpenter, for wood is still the cheapest material. The game is then to run up houses as fast as possible and sell them "on time" to newcomers. This is thoroughly legitimate business, and 8 per cent. interest can be made on the original investment, and from £50 a month and upwards out of the building work.

Naturally in a country where so much is done "on time," and where everyone is trying to become a millionaire by means of the American method of buying and selling on the instalment plan, the owners of "payments coming in" want to get the ready cash for the whole amount. In consequence, they discount these payments at rates varying according as money is tight or loose. Discounting "agreements for sale" is one of the safest investments that can be found, *provided that enough has been paid down in the first instance*, and from 11 to 20 per cent. can be obtained for money, with a possible chance of making a very favourable foreclosure. To investors in

Europe I cannot too highly recommend this opportunity, *while it lasts*, as it combines very good interest with absolute security. To secure these investments it is best to employ a reliable dealer in money, and a sound local banker is to be preferred to the manager or branch manager of a great banking company. The investor would be required to pay from 1 to 3 per cent. of the interest obtained for finding the investment, looking after it, and doing the necessary work in the Land Registry Office.

In connection with all dealings in land (and lots) there are none of the complications that are the curse of the older settled countries, and there is no need to employ lawyers, an office boy being capable of doing all that is needed. The British Columbia Land Registry Act of 1906 is thoroughly easy to understand. Every bit of land—the courts do not recognise ownership otherwise—must be registered in the Land Registry Office of the district, which grants either an "absolute" or "indefeasible" title.

A certificate of indefeasible title is conclusive evidence of ownership of an estate in fee simple against the whole world (the Crown only excepted), subject to such indorsements as appear on the back of the certificate. The registered owner of an "absolute" fee is deemed the *primâ facie* owner of such an estate of freehold as he legally possesses. One of the advantages of an "indefeasible" title is that it carries Government protection, whereas an "absolute" title does not. It is optional with the applicant whether he applies for an indefeasible title or an absolute one, but the rule is, once indefeasible, always indefeasible. The fees on an

indefeasible title are slightly higher than those on an absolute. The holder of an absolute title may at any time pay the additional fee and apply for an indefeasible title, and if the evidence of his title which he produces is sufficiently strong to support an indefeasible title, a certificate of indefeasible title will be granted to him. Agreements of sale, mortgages, and any other instrument purporting to transfer, charge, deal with, affect land, or any estate or interest therein, are received into the Land Registry Office for safe keeping, and the time of their being received is stamped on them, and they are entered in the books, to which access is allowed for a small fee. The whole system is as near perfection as human ingenuity can devise.

In " boom " times the pressure on the Land Registry Office becomes very great, work sometimes getting as much as six months in arrear. But it soon rights itself by the addition of a few extra hands, and the inevitable collapse of the boom when values are " up to building prices," or beyond what building prices will be for some years to come.

In Victoria the last boom was wonderful. When I came down at the end of the summer of 1910 one of the most upright real estate men told me that things were going to be good, and that values were going to increase at the rate of 45 per cent. for the next few years. He assured me that by risking the possibility of making " second payments " I ought to be able to double or treble my money each year. I, unfortunately, did not follow his advice, and backed my own judgment by getting hold of land which, from the topography of the country, I made certain would be a junction of five

lines of railway. My guess turned out to be three miles wrong, but in theory I was absolutely right, for I put the prime cost of heavy work against the capitalised cost of extra haulage, and less than 100 years hence the junction will be where I placed it. However, instead of making 500 per cent. on my money, as I had hoped, I only made a few pounds.

But to get back to Victoria. Values instead of increasing at the rate of 45 per cent. a year increased 900 per cent. in two and a half years. Some of the increases are worth mentioning. In the Fairfield Estate, the farm of a former Governor, Sir James Douglas, two-acre blocks were selling at £400 apiece "on time." They were then subdivided into twelve lots, and £80 a lot "on time" was asked, of which only £16 was wanted "as a first payment." To-day the same lots are changing hands at £600 each. In Douglas Street the increase was equally marvellous. A doctor bought a nice little brick house on a corner for £4,000 "on time." Last year he sold it to a great wholesale and retail furnishing house for £36,000. The Canadian Pacific Railway paid £40,000 for a block in the centre of the town, which a few years previously could have been bought for £3,000. The Canadian Northern Railway paid £25,000 for a similar block. Money for investment came in wholesale.

The result of all this was that the whole town was for sale, and suburban subdivision after subdivision was put on the market and sold on the easiest of terms to the poor man to enable him to join in the gamble. Personally, I could not understand it. Money was worth 8 per cent. at the very least, and lots pan out at

prices which, after erecting a house, would not give a return of 4 per cent. on money. It is evident that either something was wrong, or that in discounting the future people were content to pay pretty stiffly for "climate" and surroundings. Values, although they are now "up" both in Victoria and Vancouver, will undoubtedly increase as far as inside property goes, and there are still very many "good buys" to be had, which should appeal especially to the man who can afford to build, for residential flats are badly wanted in both cities.

I have made mention of Fort George as the strategical centre of the northern interior, and so undoubtedly it is, but the real town-site—the old native reserve—has yet to be placed on the market. In this part of Fort George, which is the property of the Grand Trunk Pacific Railway, there will undoubtedly be some very great increases in value and big money to be made. The usual way in western America is to overdo a good thing, and Fort George has certainly been overdone. There is North Fort George, South Fort George, Fort George, Carney's Pre-emption, Macgregor's Addition, and a host of others. As far as other towns go on the route of the Grand Trunk Pacific, I am told that Fort Fraser is good, but I have no means of checking this statement. Tête Jaune Cache (pronounced Tait wón cash), or somewhere in that neighbourhood, must become a very great railroad centre. Telkwa, or somewhere near by, must become a very large distributing point, and the centre of one of the biggest mining districts in British Columbia. The future of Rupert, the western terminus of the Grand Trunk Pacific, is assured.



Photo by courtesy of Grand Trunk Ry.

RUPERT. THE DOCKS, DIGBY ISLAND IN DISTANCE

It must win all the trade of the Far East and the trade with Alaska. The opinion of the Coast is that it will become a city of great warehouses, and that the residents will live on Digby Island opposite, and at Prince Edward, the little town eight miles back on Porpoise harbour. I repeat, however, that I do not like real estate, as it prevents the country going ahead, and can only be regarded as legitimate business as a side-line or in conjunction with development.

CHAPTER XIII

THE PROFESSIONS AND THEIR FIELD

British Columbia is not a professional man's country *at present*. It wants workers, and above all, men who will get enterprises into shape for English and European capital to handle. On the Pacific Coast, every profession and almost every skilled trade, in order to protect itself, has secured very strong laws from the local legislatures, so that the newcomer, however fully qualified he is in his own country, has to serve an apprenticeship for some period, and then pass an examination. There is a small opening for doctors and dentists, a larger opening for lawyers, and a very considerable opening for young surveyors.

As far as British Columbia is concerned, there is roughly one doctor to each 700 people. Some of the newer towns offer a small scope at first, with a certainty of better things later on. There is no faculty at present for training medical men and granting them degrees, but there is a college of physicians and surgeons with headquarters at Victoria. The council of the college, in accordance with the Medical Act of 1909, are the governing medical body of the province, and hold two annual examinations for admission to practice. The examination fee is £20, and the application, together with the applicant's diplomas, must be in the hands of the registrar of the council two weeks before

the examinations, which are held the first Tuesday in May, and the last Tuesday in October. Doctors who were qualified under the Medical Act (Imperial) before 1887, are exempt from examination, and on complying with the council's regulations are entitled to practise. Otherwise the council require diplomas of the full course of a recognised school, and the passing of their examination in eight subjects relating to medicine, surgery, and jurisprudence. A doctor is thus virtually compelled to gain a year's knowledge of the conditions of the country before he can be examined. During this year he could make certain of having some work in helping one of the present practitioners.

Dentists are needed more than doctors, and there are several good openings in the smaller towns.

The legal profession offers far more scope than the medical. Six months' residence in the province, and the passing of an examination in the statute law of British Columbia (in some cases as well the common and statute law of England, as far as it is applicable to British Columbia) and the practice of the local courts, gives any barrister or solicitor from any other part of the British Empire the right to practise. The profession is governed by the Incorporated Law Society of British Columbia. The rules of the Law Society at present in effect are framed under the authority of the Legal Professions Act of 1887. The executive committee, known as "benchers," are *ex-officio* the Attorney-General of Canada, the Attorney-General of British Columbia, the retired judges of the Supreme Court of British Columbia, and nine other members elected annually.

Students-at-law and articled clerks are entered after the age of sixteen. There are three examinations for call and admission of students-at-law and articled clerks, in addition to preliminary examination. The term of probation is five years, except in the case of a student-at-law who previously to having been entered on the books of the society is a graduate of a recognised university in Great Britain, Ireland, or Canada, in which case it shall be three. The distinction between barrister and solicitor is clearly defined, and the examinations are distinct ; but any solicitor in good standing, upon passing the prescribed examination, may become a barrister, after one year's actual practice, by paying the barrister's fee, and any barrister in the same way become a solicitor, and in practice solicitors are usually barristers and *vice versâ*. The scale of fees is as follows :—

	£
On admission as student-at-law or articled clerk	10
On admission of barrister or solicitor from elsewhere	10
On call to the Bar	20
On admission as solicitor	20
For intermediate examination	2
Annual subscription to Law Society	6

The profession of surveying is by far the best in British Columbia, and will be so for many years to come, as the survey work of the country is already seven years in arrear. The British Columbia Land Surveyors are a "close corporation," and only admit

surveyors from other parts of the British Empire after eighteen months' experience of the country, twelve of which must have been passed with one of their own members in actual survey work in the field. At the end of this period a very thorough examination in professional subjects and on all fundamental questions of provincial law, connected with the registration, survey and measurement of land, must be passed.

The chances in surveying are more for boys than for men. All surveyors in British Columbia have more work on hand than they can do, and are very glad to take pupils. Pupils have to pass an elementary examination in mathematics before they can apprentice themselves to surveyors. At the end of three years' apprenticeship they pass the examination dealing with their profession and their knowledge of its law. During the time of their apprenticeship they earn from £12 to £25 a month and all found, for six or seven months of the year. During the winter months, they usually work for their employer at about £6 a month in the office, or possibly pick up a draughtsman's job in the Government buildings at from £15 to £20 a month.

A qualified surveyor does not work for less than £4 a day and his expenses, and can get all the work he wants. However, every surveyor does far better by going into business on his own and working on contract.

For a youngster going out to British Columbia, taking up survey work offers him a good healthy life, very fair money, and the ability to gain a thorough knowledge of the country which will be of immense use to him later on.

The British Columbia Land Surveyors Act of 1905

contains all the laws relating to survey work, and has established the Corporation of Land Surveyors of the Province, whose Board of Management is at Victoria. The Board holds examinations twice a year, and grants commissions as provincial land surveyors. The Government in a more recent Act have insisted that they can employ anyone they like on their own work, whether a British Columbia land surveyor or not.

Civil engineering as a profession is very much behind surveying. The Canadian railways do not pay high wages, as they have such a large number of trained and partially trained men to draw from, thanks to the work of the International Correspondence Schools. The wages are from £30 to £40 a month for a location engineer, £20 a month for transit men, £16 for levellers, £15 for draughtsmen and topographers, and £10 a month for picket-men, chain-men, axe-men, etc., and of course all found while in the field. Resident engineers get from £25 to £60 a month, according to the importance of their work. The railway side of civil engineering offers very little scope, and any ambitious man would be well advised to leave it entirely alone.

In connection with forestry and lumbering, there is an immense scope for men who know all the duties and have executive ability. To gain this knowledge, a man should have a sound training as a mechanical engineer, and he should go through every duty, working for wages as donkey-man, hook-tender, faller, etc., and then should learn all about mills, timber cruising and estimating, and building logging railways. At the end of say four or five years' work and study, during which

time he should be earning from £15 to £30 a month, he would be worth a great deal to the big timber people, and could command his own wages.

In mining, the chances are very good—British Columbia being Canada's mineral province—but in the present phase of development, wages are far from high. However, as a mining engineer, who has been sensibly trained, can turn his hand to anything, from actual manual labour to assaying and prospecting, he should never be in want of work at fair wages, and with probably an interest in the business as well.

Taken all round, no part of Canada can be considered the field of the professional man, who has not had his training at a Canadian University. The Canadian Universities are far better and far more practical than our own. The best are McGill in Montreal, with affiliated schools throughout Canada, Dalhousie in Nova Scotia, and Guelph, the great farming college, in Ontario. The British Columbia Government are building a university at Point Grey, one of the suburbs of Vancouver, embodying all that is best from the other great Canadian Universities, with the object of training the sons of colonists to direct the development of British Columbia, and for the future field of the whole of the Pacific Coast. Their system, like that of all Canadian Universities, is to have very low fees and to enable the students to earn sufficient to pay the fees, and gain a practical training as well by working for wages in their own line during five months of spring and summer. The British Columbia University should appeal very highly to men who are retiring from their work in different parts of the Empire, and who want

to settle in a healthy country, and at the same time educate their children as cheaply as they can in the same ideals as they have been brought up. A strong point in the organisation of the University will be its very thorough and up-to-date agricultural instruction.

The public service of British Columbia, though not highly paid, offers permanent work with a pension at the end, and good opportunities for advancement. Commissions in the Canadian Army, which is really only just beginning, are given by the Dominion Government to cadets at the military school at Kingston, and to the officers of the militia forces in each province, and British Columbia's share of these commissions will undoubtedly be a large one.

The provincial police, who do not wear uniform, begin at £15 a month and quarters, and the commencing pay in the Government offices is about the same. Government service invariably means beginning at the bottom of the tree, and its scope, excepting for the men with special qualifications, may be considered as having a limit in from £30 to £40 a month as a road superintendent or Government agent.

Women are badly wanted in British Columbia, and there is an organisation in England to make arrangements for them going out. The Secretary is Miss Lefroy, whose offices are in the Imperial Institute, South Kensington. In connection with Miss Lefroy's work, I have not learnt whether the arrangements at the other end are satisfactory, but I do know that the Young Women's Christian Association has homes in which girls can live at a small rate in Victoria or Vancouver till they have found situations. As cooks,

waitresses in restaurants, stenographers, and domestic helps, their field is almost unlimited, and there are a certain number of openings for nurses and school teachers. However, women's true *métier* is marriage, and in a country which, after cutting out the old people and young children, has seven able-bodied men to one woman, wives would be at a high premium were not so many men always restless and moving on in the hope of making the " big stake."

The best thing that can befall our young man or woman, whether with a profession, trade, or with capital going to British Columbia, is to secure a home in a respectable family at the start; it matters not whether as a friend or as a servant, for the willing worker is the master's equal. A good home means introduction to the best society, and has the most valuable influence on future success, by enabling the emigrant to avoid the expenses, embarrassments, and bewilderments so frequently attendant on first arrival in Canada.

CHAPTER XIV

GOVERNMENT AND POLITICS

The terms Conservative and Liberal, which have survived from the English traditions, are entirely different from the way we employ them at home. In the province and all through the Dominion people speak of the Government and the Opposition, and by these terms mean those who have the power by constructive policy to create values, and those who want to get that power. Voters have totally different ideas to those of the older settled countries, and think in real estate, mines, forests, railways, and the general well-being that rules with extensive development. What follows in this chapter is intended to convey things as they are and western Canadian ideals.

Prior to 1904, when the Liberal Government of the Dominion got a further lease of life by backing the Grand Trunk Pacific project, the carrying on of the public service of British Columbia was a matter of great difficulty, and the previous kaleidoscopic changes of the Provincial Administration were due to failures to raise money to carry on the Government, and to the continual bickering of the leaders of the colony. In 1903, McBride, who had previously divided opinion into party lines, became Premier. His administration now is so firmly established that, unless he chooses to

succeed Lord Strathcona as High Commissioner in London, he is likely to remain till his death or voluntary retirement what he is now, "The Uncrowned King of the North Pacific."

Some notes of this wonderful man's career are worth giving. He is a comparatively young man, just over forty, but looks more, owing to his hair having turned prematurely grey. His father, who came of good north of Ireland stock, was in the service of the Crown at home, and subsequently in the colony. McBride began life, like many of the great men of Canada, at the very bottom of the tree, filling in the intervals in his studies with hard manual labour. He apprenticed himself to a lawyer, after his University career at Dalhousie, served his articles, "started in" on his own, and built up a successful law business, becoming a King's Counsel. Going into politics, his striking personality, his power of influencing others, and his ability to grasp broad ideas and to generalise soon brought him into prominence, with the result that he was asked by the Lieutenant-Governor to form a Ministry. His first great achievement was his daring and original timber legislation, which threw the timber into private hands, the Government being virtually a co-partner. This brought the province out of stagnancy, and furnished an adequate revenue to carry on the public service and to build some of the roads that were so urgently needed.

McBride, having thus succeeded in making the financial position of the province unassailable, was able to give a guarantee to the Canadian Northern interests to enable them to finance the building of that portion

of their trans-continental system that traverses British Columbia. In return for this guarantee he bargained with the Canadian Northern to build a system right through Vancouver Island. This masterly piece of policy forced the Canadian Pacific Railway to carry on the island railway (the Esquimalt and Nanaimo), so that in less than five years from now Vancouver Island will have two completed lines of railway running through its length, with branches going to its many ports.

In the past the Dominion and Provincial Governments were always at loggerheads. When the Liberals were in power the province was most unfairly treated, questions of vital interest to the Pacific Coast being ignored at Ottawa. Since the defeat of Sir Wilfrid Laurier (the time when Canada proclaimed its entity as a nation by refusing to become an adjunct to the United States), the differences between the two Governments are amicably discussed, and are on their way to be successfully solved. McBride has got an old friend, Mr. R. F. Green—said to be the wisest man in British Columbia—to give up his business and to be his right-hand man in the Dominion Parliament at Ottawa.

In the Cabinet of the province McBride is exceptionally fortunate in his lieutenant, Mr. Bowser—a really strong man and a worker—who holds the portfolio of Attorney-General, and is also Minister of Fisheries. His Minister of Lands, Mr. Ross, has the almost herculean task of running his Department, which includes the Forests, and is making a good job of it. The other Ministers, Dr. Young, who looks after education, Mr. Taylor, who has the Public Works, a most important portfolio, and Mr. Price Ellison,



Photo by courtesy of the Agent General

SIR RICHARD McBRIDE, K.C.M.G.
Premier of British Columbia

" an old timer " and successful farmer, who runs the Treasury and Agricultural Departments, are all pleasant men to meet, and who are at one with their chief. Outside the Cabinet there are some very sound men who have built up great businesses. The three most conspicuous of these are, a successful wholesaler and a man of great constructive ability, a great cattle breeder who has spent a lot of money in land clearing on Vancouver Island, and one of the great timber merchants. The rest of the House, some forty strong, with the exception of two Socialists, are of McBride's way of thinking, and voice the opinion of the entire province, which is thoroughly satisfied with its present Government.

In the various Governments in the different parts of the world I doubt if a stronger Government could be found than that of the province of British Columbia. Its very strength ensures its continuity, and if Carlyle's maxim, " the strong thing is the just thing," is true, McBride's Government, which has no real opposition, is just. The only quarrel his opponents have with him is over the alienation of lands and resources. I, myself, have no politics whatever (other than wishing to deport all the Asiatics and hang half the real estate men) and no brief to speak for McBride. I am, therefore, entirely dispassionate in my criticism.

As to the alienation policy, I am convinced that by no other method could the finances of the province have been restored. Besides, lands, forests and mines in the hands of the Crown are valueless. As soon as they get into private hands values are created, and it is a simple matter for the Government to force developments—and with developments an increase of popula-

tion—by making the taxation of wild land, idle forests, and unworked mines sufficiently high. To those who talk "rot" about all the land being blanketed by big people, the best reply is that more than one-half of the province is in reserve for pre-emptors only. As a matter of fact, a thorough justification of the alienation policy is to be found amongst the people themselves, very few of whom understand co-operation—each man being out for himself alone. The country only admits of being developed on co-operative lines, or by the big man—and the big man means London, which has both the money and the knowledge to enable it to handle big business.

Of the problems that confront the statesman, the first and foremost is getting markets. In this respect, the province has virtually no help from British Consular officers abroad. The settlement of the prairie and the completion of two additional trans-continental systems will help a great deal, especially in conjunction with the opening of the Panama Canal. London can help largely in the building up of the Asiatic trade if she will "start in" and build her railways throughout China, and thus occasion a greater demand for British Columbian lumber. The building up of trade north and south is to some extent in the hands of the British Columbian Government, and I do not feel that it would be premature to subsidise a weekly steamship service to South American ports, though it might be premature to further subsidise the lines running to Australasia. One of the conditions of such a subsidy could be that the subsidised ships would have to be built on the Pacific Coast of Canada.

Another problem is the importation of agricultural labourers. There are plenty in the British Isles and northern Europe willing to go, but the great difficulty is the high cost of passage. As the Government are thoroughly committed to advocate the employment of white labour, it follows that they should take steps to enable the white man to come in. To accomplish this, they can bring pressure to bear on the great carrying companies, and force them to grant cheaper passages to labourers. It now costs a labourer £15 (and there are several additional expenses) to get to British Columbia. The same man has only to pay £8 to go to Australia. The Governments of the various divisions of Australia fully realise that the wealth of their country is the people and their industry, and now lend half the passage money (£4 out of £8) with no other security than a promise to repay ; to specially suitable families they will even advance the whole of the fare.

Naturally the ultimate development of assisted passages would mean that a land bank would have to be run by the Government. The Australian Governments are already doing this, and a settler, on his arrival, after having furnished proof of his ability, can obtain money at a low rate of interest, not only to get a farm, but also to stock it with plant, cattle, etc. The success of properly run land banks has thoroughly justified their establishment. In Italy it is found that 95 per cent. of the loans are repaid with full interest after a few years.

In the problem of labour, we are confronted by certain types that cannot assimilate with the population, and who are only staying in the country until they have

collected enough to get home. Of the European types that do not assimilate, the Italians are the least desirable : they work on railway grade and on street work for less wages than other white men, and they bring the curses of their secret societies with them.

The three Asiatic types that are in evidence in British Columbia are Chinese, Japanese and Hindoos. The Chinese work in the coal mines and in the canneries for wages, and as market gardeners and street hawkers on their own. They are very docile, and in the past every one was in favour of their employment. Now, as their merchants are ousting the small white trader, and their workers save up and send their money to China instead of spending it in the country, public opinion is against allowing them in. The Dominion Government charge them £100 a head for entering, but still they come. As none of them have this sum, they have to work under conditions of virtual slavery for their importers (Chinese merchants) for four years to pay off this debt.

The Japanese are a real source of danger, as they are fast getting hold of the fishing. By a special treaty, the numbers that can come annually into Canada are restricted. The provincial Parliament decided only to issue fishing licences to British subjects. As naturalisation was in the hands of the Dominion Government, the Japs very easily got round the intentions of the Provincial Act, over 300 of them naturalising themselves British subjects in one month. They have to be got out, and the question how to do this has to be tackled sooner or later.

The Hindoos are a very good class of men, many of

them having served in our army and fought in our wars on the north-west frontier of India. They work at the hardest and roughest forms of manual labour, railway construction and land clearing. As the Dominion Government prohibit their women landing, they are not likely to remain in the country after the wages for unskilled manual labour get down to eastern Canadian prices.

On the questions of the fisheries and the ownership of resources in the railway belt, there has been a lot of clashing between the Dominion and Provincial Governments. These questions are virtually solved now, but two serious questions remain ; one is the absurd amount of idle land which the Indians have in their possession which the Dominion Government administer for them, and the other is the ridiculously small sum the Dominion Government annually pay the province. Last year the Dominion Government had a surplus of £8,000,000 sterling, and in spite of this, all it gave to its largest and most prosperous province was les than £150,000.

The coast Indians have been pampered and petted a great deal too much. There is a real scoundrelly class of missionaries engaged in inventing Indian grievances, and bringing them before the Dominion Parliament. The Indians have all the best land in the province—quite twenty times as much as they can possibly require, and many of the Indian reserves have either no one on them or perhaps one or two families at the most. The number of Indians in British Columbia is about 25,000, and they are not increasing. British Columbia has no use for the namby-pamby way in which the

Dominion Government handles the Indian question, and I think I am right in saying that everybody would be pleased if they segregated the sexes and let them die out all together.

The question of getting a fair share of the Dominion revenue is much more difficult. The British Columbia Government are of the same way of thinking as the Dominion Government, and naturally it is very hard for them to put pressure on their friends. The leaders of British Columbia have not to worry about keeping in power, the people being solidly for them. The members of the Dominion House outside British Columbia would run a very good chance of being put out of power if they did not spend most of their money in the East where votes tell. The great revenue of British Columbia is quite inadequate to meet the enormous demands arising out of the absolutely necessary development of the province in order to keep pace with the requirements of her increasing population, and before going to London for a loan, as she will have to do, it is only just that she should receive her rightful share of the Dominion revenue.

The strong financial position of British Columbia is very little understood in London, as they do not run things in the same way out there as they do at home, the published figures of the expenditure being for a year in arrear and the estimates being for a year in advance, thus omitting the previous year's expenditure. As far as I can gather, British Columbia has a surplus idle in the bank of £1,200,000. She has due to her, at 6 per cent. interest, £3,000,000 for the sale of land. Last year the Government spent, roughly, three and a

half million sterling, and had a surplus revenue of half a million. For the coming year they estimate their expenditure at a little over £3,500,000, and their revenue in proportion, although they are going to use some of their surplus in the bank. In every branch their revenue is increasing, and the only two branches of revenue they will ultimately lose are their share of the Chinese immigration tax, estimated at £100,000 (a figure well under the mark) for the coming year, and the payments for purchases of land, estimated at £400,000 (a figure probably equally under the mark). The actual debt of British Columbia is, roughly, £1,700,000. Any railway guarantees she has given are fully secured by a first mortgage on the lines. As it falls within the sphere of the executive to borrow money for developing the resources of the province, and as this book is specially written to show the English investor how things are, I have given this rough summary of the province's financial position.

In international politics there are one or two questions which should be settled with the States before they cause trouble. Two minor adjustments to the boundary should be made. The end of a small point, just south of the mouth of the Fraser, is cut by the forty-ninth parallel, and consequently belongs to America. It has no advantage to the States at all—I doubt if it is a square mile—and is simply used by smugglers and salmon poachers, who give a lot of trouble to both Governments.

Another alteration to the boundary should be made in southern Alaska. When politicians and lawyers run boundaries they know nothing about country

whatever, and they invariably make very impracticable lines. It was quite sound making the International Boundary the centre line of the Portland Canal, but the line should have turned north before Portland City was reached, because the country immediately inland from Portland City is Canadian territory. This certainly should be adjusted before troubles arise.

Another point is the fisheries. The Americans have already had far too great favours over the fisheries in the south. I think that if we want to keep the waters to ourselves, we should declare the whole of the Hecate Straits between Queen Charlotte Archipelago and the Chain of Islands, roughly, 5,000 square miles of the best fishing banks in the world, a *mare clausum*. To do this is the duty of the Imperial Government at home, and they should act at once.

The naval problem, although it is bound up with local and Dominion politics, has a very serious Imperial aspect. The Pacific Coast is virtually without any defence whatever. The Imperial Government have two sloops, the *Algerine* and the *Shearwater*, which are really only small survey boats, to represent Britain's power from Chili to Alaska. The Canadian navy on the Pacific Coast is an absolute farce ; His Majesty's Canadian ship *Rainbow* is a second-class cruiser, and cannot be manned by Canada, as the pay offered is not sufficiently attractive. When I saw the *Rainbow* at Comox last year she had had seventy-six desertions and twenty men bought out, and so short-handed was she that she took two days to coal and stow her coal in the bunkers. The defences of the port of Esquimalt are very far from being in the state that the Imperial

Government left them when she withdrew her fleet and garrison and handed over the fortifications to the Dominion Government, and the cities of Victoria and Vancouver, to say nothing of Rupert, are practically at the mercy of any enemy.

The Dominion Government did absolutely the right thing when they decided to vote three all-gun battleships to be put into the firing line. *The defence of the Atlantic Coast can best be carried out from the North Sea and English Channel*, and it is "up to" the Home Government to repay Canada for her generous contribution by again sending a squadron to the Pacific and taking over the defences of the far western ports.

The effect of the Panama Canal will be to split Canada commercially into two distinct portions, and it appears to me that the best thing would be to prepare for this eventuality politically. The Dominion is altogether too unwieldy to govern from one centre, and I suggest, both to England and British Columbia, that a conference should be held with a view of annulling the British North America Act, and the establishing of two separate central governments, one for the Atlantic and its Hinterland, and the other for the Pacific and its Hinterland, their boundaries being the dividing line from which the trade will go respectively east and west. (*See* Map V.)

CHAPTER XV

PLEASANT REMINISCENCES

Halfway from Vancouver, on the seventy-mile trip to Victoria, the steamer enters Plumper's Pass, and from here onwards one sees the real beauties of British Columbia, scenery of which one never tires. Here and there, on the Chain of Islands, the vivid green of alders, or a pretty and prosperous farm, peeps out from the sombre forest of fir. The giant Mount Baker, whose snow-clad cone stands a landmark for many miles, can be seen far distant in the steamer's wake. To the south and east is the outline of the entrance of Puget Sound, on whose shores stand Seattle and half a dozen American towns. To the south and west, some twenty miles away, are the foothills of the mighty Olympics, whose glistening white peaks tower high above the skyline.

The Straits are full of traffic. Side by side we pass another of the Canadian Pacific Railway's palatial steamers. A tiny tug, towing a big boom of whole trees, swings into a little cove to shelter for the night. Another tug, with half a dozen scows behind, tells of the railway work on the Island. We have left the mosquito fishing fleet at the Fraser's mouth, but every here and there are groups of gasoline launches trolling for salmon. On the starboard side, back from the hundred

and one little islands, shows up the shore line of the Sannich peninsula and the small town of Sidney. On and on, past rocks and islets, the same wonderful scenery.

As the steamer rounds the fruit farms of Gordon Head, and clears the point that separates Cordova and Cadboro' Bays, a natural park of irregular but perfectly-spaced oaks forms the feature of the island landscape. Oak Bay, Shoal Bay, Foul Bay, Ross Bay, the last resting-place of "the old-timers," are passed in turn. Each with its own charm, delightful homes in white and red, in light and tan, and in a variety of other hues, stand out from the remnant of the forest. Gardens, many a blaze of brilliance, green lawns girt with flowering shrubs, and in the background stately mansions, seemingly fairy palaces, steeped in a maze of marvellous loveliness, recall the memory of a picture sprung from the brain of some old master. Such is one's first impression of the "City of Homes," the "City of Clear Skies," the city that knows no winter, and whose summers are cooler than our own.

The point that forms the entrance to the outer harbour is passed, and the charm gains and grows. The stately Parliament Buildings in grey stone, their broken lines to give them grandeur, their twenty turquoise-tinted copper cupolas, their great dome crowned by Vancouver's statue, and the bold Norman entrance-arch above the façade of steps, have a fitting setting in a front of grass and flowers, and in the glorious background of the snows of the distant Olympics.

I had not come to British Columbia to buy either scenery or climate, and must hustle something to do and learn the conditions of the country, so thirty-six hours later I am in the field on some sort of survey work. A waggon meets us at a siding some twenty miles out of Victoria, and we are driven down to the beach. The steep side of Salt Spring Island obstructs the view. A stretch of flats uncovered by the tide is the playing-ground of hundreds of teal, brent, and butter-balls. In the big trees by our camp a pair of fishing eagles, with their showy snow-white heads, have their nest. There are some 140 acres to be subdivided into ten-acre lots overlooking the sea, to sell to intending settlers. The owner is a man who has just built a beautiful home out of the sandstone on his property, and grows onions under irrigation for the Victoria market. The work in the woods is interesting at first, and I feel the hopelessness of my previous African training, for the men of the party compare my axing to little beaver's teeth. Ten days and the job is done, and one must hustle again—this country means going from one job to another, as my friend who took me to the Vancouver horse show warned me beforehand. The Canadian Pacific Railway have a party going out, and I join it, as it offers the chance of seeing something of the timber and the best part of the east coast of Vancouver Island.

Life on a survey party, though not hard, would be terribly monotonous but for the constant change. In the valley of the Tsolum some of the little farms round Courtney were very charming, and some of the people very kind. Fishing—the best trout fishing in the



Photo by courtesy of Can. Pac. Ry.

VICTORIA. PARLIAMENT BUILDINGS

The Olympics in the Background

world—was to be had. A five or six-mile walk took us out of the woods to the seashore ; sea-bathing and washing our own clothes was our Sundays' recreation. Our constant chopping prevented us from seeing much animal life, for sound carries a long way in timber ; but there were plenty of signs of black bear, which at that time of the year were living on the skunk cabbage (a species of wild arum) and huckleberries and other forest fruits. I saw my first bear when, with another man of the party, I was going out on line. He was down in a deep gully, and so intent on eating salmon-berries that we got within half a dozen yards of him before he noticed us ; he looked up from his meal, and seemed very bewildered. My companion shouted, " Hike, you son of a peach ! "—the Canadian term of endearment is not exactly this, but it sounds something like it—and he hiked up the side-hill of the gully, turning round halfway up to have another look at us. One day on line we were able to listen to the music of the wolves—quite a pack, as their different voices told. The raven that talked to our leg of beef, hanging up in a sack from a bough of a tree, I was quite fond of, as he used to wake me every morning. He said, though I could not understand him, some very interesting things to that piece of meat, and I was really sorry when Charlie, the cook, shot him.

Five and a half months have passed, and now, day by day, flights of cranes pass high over head from their breeding grounds in Alaska to their winter homes in California. The weather has been perfect throughout, a delightfully cool summer, hardly a drop of rain, and not a single thunderstorm—for thunderstorms are

virtually unknown on Vancouver Island. However, the birds going south tell me it is time to find a winter's job in town, and I do not fancy the coming wet work in the woods. A trip round Vancouver and Seattle to see those cities and "get acquainted," and then work in Victoria.

Rents were rising, comfort was not to be found in rooms, and eating in the shilling restaurants was far from satisfactory, so with two other men I hired a houseboat lying close in shore in the inner harbour. The *Ark* it was called. It had a sitting-room, dining-room, kitchen, scullery, and four cabins. Our landlords, its former occupants, had furnished it well, and left behind a splendid library for our use. We paid 4*s.* a month to a small boy who took water to other boats, to fill up our four pails every day. For 2*s.* a month we were able to buy and have delivered on board our daily newspaper. Week and week about, we took turns to get up early in the morning and light the kitchen fire, and cook the porridge and our breakfast. Halibut steaks, salmon, sausages, and bacon formed our staple lines, but we roasted a big joint on Sundays, which we ate cold for luncheons during the week. Lunch was always a rush, and we washed it down with beer from the cask we kept on board and replenished as often as it ran out. Our tradesmen were all our friends, and gave us full measure and good value for everything we bought. They helped themselves to anything they wanted on their visits, and one day, I forget whether it was the milkman or the butcher, omitted to turn off the tap of the beer barrel—5*s.* worth of good liquor wasted, and no drink for lunch. Satur-

day afternoons were spent in hunting driftwood in the harbour, and Sundays in walks ashore. It was a very happy *ménage*, and cost us, excluding rent, less than £2 12*s*. each a month, and that covered beer, whisky, and coals as well; some of our rent we got back by letting moorings to gasoline launches at 10*s*. a month each.

As I said before, British Columbia, unless one is in the employ of a big outfit, in the Government or in some business of one's own, means going from one job to another, so January saw me working in Vancouver, and a few days later I left that work to go "land staking" in the northern interior in the depth of winter. It was not exactly a pleasure trip, but I found the cold far less trying than I feared, and by no means as rigorous as the prairie, and it certainly was healthy work. I cannot say that I prefer the northern interior to the coastal belt, but there were evidences of a true and lasting prosperity in the little habitations I saw on and off the great Cariboo Road. The cattle were rolling fat, and hay was selling to teamsters on the road for £8 a ton and for £20 at Fort George.

Of my work and my wanderings in quest of fortune after my land-staking trip I will not go into. I wound up the summer by joining the survey staff of the city of Victoria. Victoria had let a contract to pave thirty-seven miles of streets, and did not know exactly where they were. Naturally, the work was very interesting, and it kept me fully occupied. Still keeping to my aversion to high rents, I camped on the seashore in Cadboro' Bay, and walked four miles morning and evening to my work, eating well at the best hotels

in town, in order to get on some of the weight I had lost. Later, I had the good fortune to meet a cheery American dame, who let rooms and kept a cow. I rented the top of the barn above the cow, and ate with a Norwegian woman whose good cooking had won her quite a renown.

I had a great deal of good-humoured chaff about the cow. On its death—it had a choking fit, and had to be killed—my fellow-workers presented me with a model cow, and in the accompanying testimonial they asked me to keep it always as a perpetual memorial of my departed friend. My kind motherly landlady looked after it, and on my return from my own work in the field a year later, I turned it to good use by giving it as a wedding-present to a friend, whose girl I described as "my importation," because it was partly on my advice that she came out to join her man in British Columbia.

Victoria has certainly some very charming women, both English girls and pure-bred native daughters, and although life is said to be hard on the women (for domestic service is almost unknown) many seem to make the most of it and are really happy. One couple in particular had an ideal time of it. He had been an Alaskan explorer, and had got one of the last pre-emptions near Victoria—seven acres of land and 153 acres of rock. He had built—all his own handywork—a charming two-story log hut. On the hill-sides in the woods ranged his Angora goats. A lake at his doors provided his household with trout and ducks, and himself with fishing and shooting. His five cows, his chickens and his guinea fowls brought in a comfortable

living, and his talent for house-building enabled him to add substantially to the family's well-being. His wife was all a settler's wife should be, and their four chubby children were the pictures of health. Life had not always been too rosy with them, but his helpmate, who had had a true training when her father was freighting on the prairie, had enabled him to win through. And I think my week-end visits to their home were amongst the happiest of my recollections.

There was lots to be done in the spare time. Victoria had several sports clubs, and tennis, golf, football, polo, baseball and cricket were to be had. There were also rowing clubs and yachting clubs, and a great many men owned their own motor-launches. Often on Sundays I went salmon trolling with a friend, and joined the fleet of rowing boats and gasoline launches that played at fishing outside the outer harbour. Rough shooting—quail, pheasants, grouse, and an occasional deer—was to be had quite close in; but although shooting is my sport, I left it alone in British Columbia, for there were too many men untrained in the use of arms, and with no experience of the forest, who used to go out and mistake other men for game, with the result that in one year there were nineteen shooting accidents, and many of them fatal. Had I had a gasoline launch of my own on which I could have slept, I would have undoubtedly got away week-ends, and had my share of the wild sport of the coast.

I think that of the memories which will remain most vivid, and last longest, were the doings that we had in Victoria at the time of the Dominion elections in 1911. It was rather a trying time; just then the

Moroccan affair was on, and we all feared a German war. Our own affairs kept us in still greater suspense. Sir Wilfrid Laurier, in order to keep in power, had bargained with the politicians over the border for virtually free trade between Canada and the States if he got in again. "Reciprocity" he called it. Now, good as free trade is, such a course was folly, for it meant the Americanisation of Canada and Canada's virtual absorption into the maw of its powerful and aggressive neighbour. The feeling of relief came when England told Germany to get out of Morocco, and Canada told the States that she did not want them.

The night of the election the principal Conservative agent stopped his trap in passing, told me we were winning, and said "Come up to-night, and you will see some fun." Dinner over, I telephoned to a friend to come out with me and kill a Liberal. As we passed the *Times* office, we saw the crowd had thinned and was looking very sour. To one friend, a Liberal, half-questioningly I said, "You have been defeated." "It is not a defeat," he replied; "it is a snowslide." There were no Liberals about, or if they were out they slunk down side-streets. The crowd round the *Colonist* office was dense. A magic lantern, worked from a window across the street, threw the figures as they came in on to a screen in the *Colonist* upper window. As each Conservative gain went up, a ringing cheer greeted it. The intervals between the victories were filled in with pictures of good-humoured chaff. The former member for the Dominion was shown swimming in the sea and calling "Oh, for a breakwater"—it was to have been his present to Victoria if he had been

returned. " Carrots from the Seattle market " called for ribald cheers, the Liberals having promised cheaper vegetables. To the picture of the late member, the crowd shouted " Poor old Bill." In their hearts they were really sympathetic, for he was one of themselves, and they liked him well. But to-night it was " Woe to the conquered " ; Canada was voicing her nationality and had no use for those who had philandered with their country's destiny, and the politicians of the States bent after her economic conquest to claim Canada as their own.

Then two bands struck up. We were served out with new brooms. Someone emptied a barrel of coal-oil into the gutter. We soaked our brooms and lighted them. Shouldering our brooms, now flaming torches, and led by the Union Jack, we formed up behind the band. Twice round the central portion of the town we marched singing patriotic songs. Then a coach and four, bearing McBride and the other leaders, pulled up in front of the *Colonist* office. After silence had been obtained, McBride, speaking in clear and measured tones, said that Canada had done something more that day than preventing the building of railways north and south instead of east and west, that she had proclaimed her true Imperial rôle, and that in peace or war she was prepared to be the greatest asset of the Crown. " God save the King " having been sung, we wandered to our homes, and felt proud as we laid our heads upon our pillows that we had played our part, for good, in the making of our country's history.

A year later the queen city enjoyed a revel less tumultuous, but equally inspiring, and happiness too

full and true to need repression. The early autumn, with its clear, cloudless skies, sees Victoria at her best. Her buildings gay with bunting, her streets festooned with ferns and flowers, arch after arch, tributes of loyalty everywhere, and great and growing crowds, foretell the visit of our soldier prince who governs Canada with all the King's powers. As the sun is halfway down in the western sky, the shrieks of half a hundred sirens, and the guns of Work Point boom out the city's welcome. Slowly and sedately the Duke of Connaught, with the Lieutenant-Governor at his side, crosses the wooden footbridge, that connects the landing of the inner harbour with Belleville, the esplanade that fronts on James Bay. The naval guard-of-honour, furnished by the Canadian *Rainbow* and the British *Shearwater*, presents arms as the Artillery Band plays the first bars of the royal salute. To the reasonable question whether the guard represents two navies or one navy, the senior officer gives the answer: "One navy, sir." The compliment of inspecting the opened ranks of the bluejackets over, the royal party go forward along the driveway, through lines of spaced artillerymen holding back the cheering crowd. On either side of the great stairway that leads to the central Norman arch below the dome are grouped a sprinkling of the leading men, officers of every regiment (the horse and foot of Canada), and a bevy of Victoria's fair daughters. Greeting everyone presented to him with a cheery smile and hearty handshake, the Viceroy then replies to the address of the city of Victoria. Two postillioned open carriages draw up. The smart khaki-clad British Columbia Horse form

round, and the procession, at a swinging trot, goes through the cheering, waving throng to the Governor's house on the hill, which is to be their temporary home.

The foundation-stone of the addition to the Parliament Buildings is laid. The veterans, with every one of whom the Duke has a kindly word—a passing reminiscence of some bygone campaign—are inspected and dismissed. The town holds high revelry meanwhile. At night every building is a blaze of light.

Before the end of the visit, a Court is held in the hall of the Provincial Parliament. The floor of the House is quite transformed. The walls, one mass of flowers. A dais, with three thrones, fills the further end. Flanked by the statesmen of the province, the Duke, his Vicereine, and Canada's own Princess, return the bows of the King's distant subjects, who pass in front of the half-circle of officers, to render their homage to the Throne. All has been splendidly done. It is a scene of joy and gladness, a scene of fervent loyalty.

As I pass out into the night and look at the flaming cross high above the city that blazes from the Cathedral spire, I feel truly sad that the former Premier, who built this splendid Parliament house and centred the capital at Victoria, has missed this great sight, and lies forgotten in a nameless grave. And I pray that the country may preserve the spirit of its hardy pioneers, and honour its great dead in as fitting a manner as it honours its loved and living Prince.

CHAPTER XVI

"WHAT I WANT TO DO"

THE general impression of British Columbia, despite the fact that more than half its population are living directly and indirectly on the increases of values and the money coming in for investment, is that of a continuous and lasting prosperity, which shows itself in the rapid growth of its external trade, now more than twice as great per head than that of England and three times greater than that of France.

The more one sees of the country, the more one realises that it has not been scratched. True, salmon-canning is well established, so is the timber industry. But the timber, at the present rate of cutting, will take nearly 500 years to finish, and by that time, new forests will have grown up. Salmon-canning is a relatively minor item compared with the absolutely untouched fisheries. Much has already been discovered in the way of minerals, but far greater discoveries are probable, as every indication goes to show that the 1,000 miles in British Columbia of the unprospected contact in the Cascades are far more mineralised than their Southern continuation, the Sierra Nevada of California.

I have endeavoured to show London the little I know of the wealth of the country, in order that it may be realised in England that not only will railways pay

almost at the start, but that the provincial guarantee is absolutely reliable. The three great carrying companies, the Canadian Pacific Railway, the Canadian Northern Railway, and the Grand Trunk Pacific, all have their hands more or less full, and there are a dozen or more sound railway enterprises still open to London, who can obtain, if the finance is serious, not only the provincial guarantee for their bonds, but a substantial subsidy in cash from the Dominion Government. I would like to associate myself with at least four railway enterprises, and can obtain "from the other side" everything that is necessary to "start in." Of the four railway enterprises, two are small branch lines from the main route of the Grand Trunk Pacific, and the other two are big projects. I give them roughly in detail :—

(1) A branch from the Grand Trunk Pacific, about fifty miles long, to the mouth of the Kitimat. Round the mouth of the Kitimat, right on tide water, are some 50,000 acres of good land, which at present has no access to markets. This enterprise would cost, roughly, half a million sterling, and the whole of this sum could be got back, and a great deal more made in the building up of the northern fisheries.

(2) A branch of the Grand Trunk Pacific, about seventy miles long, to the gold gravels of the Cariboo. I have already shown that there is over sixty million pounds to be won from these gravels, so that this branch, which would cost less than the former one, would pay from the very start.

(3) Bella Coola and Fort George Railway. Round Bella Coola there are 60,000 acres of good land, and

there is a comparatively easy route through the Cascades to the plateau country beyond. This line would cost, roughly, £1,250,000 to construct. Its traffics are assured from the first, as the greater part of the country traversed is similar to the prairie, and here on the rich white silts of the valleys cultivation can be got in hand at once. Although too far ahead of developments at present, this route would eventually be extended from Fort George to the Peace River country, whose nearest ocean port is Bella Coola.

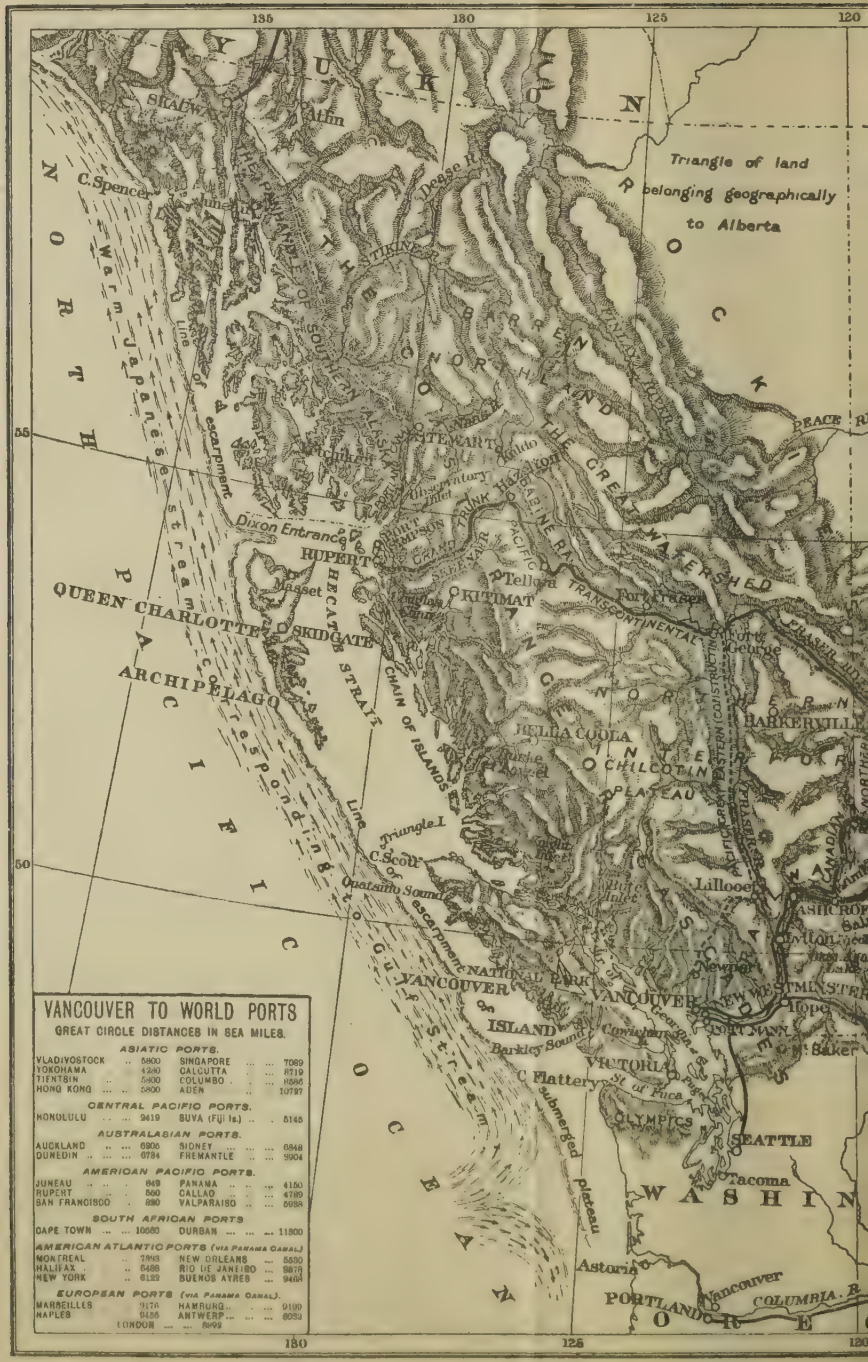
(4) Bute Inlet and Yellow Head Pass Railway. This is the most important project of all, as it means giving the island railway systems and the true frontier of western Canada, the shortest and best connection with the prairie. It will not be a cheap railway, and probably its construction will run close to £6,000,000; but in this case (and in a less degree in the preceding cases) the previous acquisition of terminals, divisional points, etc., would go a long way towards paying the cost of construction.

The fabulous profits made by the New England Fishing Company, who are selling halibut, thanks to the development of cold storage, 4,000 miles from where they catch it, has convinced me, once the Grand Trunk is through, that British capitalists can do as well in halibut 7,000 miles away with the better markets of England. I have learned the coastal belt, and I could put my hands on half a hundred ports, any one of which would be suitable for the fishing industry, and I hope that some reader will talk this over with me. I see no reason why Sir George Doughty should be allowed to have it all his own way.

With regard to the timber, my ten months' experience in the forests of Vancouver Island is worth a great deal, and I can secure suitable propositions for anyone interested.

Mining is, of course, the big thing. I should like to see English capitalists take hold of the Portland Canal Mine, and also the gold gravels of the Cariboo. I should like them also to investigate some of the smaller propositions in the Lilloet district. But what I want to do specially is to get the Cascades thoroughly prospected between the Skeena and the Fraser. It is an easier job than it appears. I would send in from different points on the seaboard a dozen prospecting parties, each five or six strong under a good leader. I would spend in wages, food and equipment £1,000 on each party, and expect them to get through their work in the five months of spring and summer. To encourage work and effort, I would give each party a small interest in their discoveries. I am certain that each party would make at least two very important discoveries. This would mean the securing of twenty-five mines. I would spend, say, £1,000 on each mine in investigating it. Thus, for £35,000 I ought to be able to get hold of at least one or two sound, big propositions to put before London.

In this very wonderful country there is so much yet to do, and so much wealth to be won, that to tell all that I want to do would bewilder the reader. I feel that very rightly has British Columbia chosen for her arms the sun setting on the foam-flecked waves of the ocean, showing that, although the apparent western frontier has been reached, "the radiance which never



VANCOUVER TO WORLD PORTS

GREAT CIRCLE DISTANCES IN SEA MILES.

ASIATIC PORTS.					
VLADIVOSTOCK	5800	SINGAPORE			7089
YOKOHAMA	4240	CALCUTTA			8719
TIENTSIN	5400	COLUMBO			8986
HONG KONG	5600	ADEN			10797
CENTRAL PACIFIC PORTS.					
HONOLULU	2419	SUVA (Fiji Is.)			5145
AUSTRALASIAN PORTS.					
AUCKLAND	6906	SIDNEY			6848
DUNEDIN	6784	FREMANTLE			9904
AMERICAN PACIFIC PORTS.					
JUNEAU	849	PANAMA			4150
RUPERT	560	CALLAO			4799
SAN FRANCISCO	890	VALPARAISO			5698
SOUTH AFRICAN PORTS					
CAPE TOWN	10660	DURBAN			11800
AMERICAN ATLANTIC PORTS (VIA PANAMA CANAL).					
MONTREAL	7898	NEW ORLEANS			5530
HALIFAX	6486	RIO DE JANEIRO			9870
NEW YORK	6122	BUENOS AYRES			9401
EUROPEAN PORTS (VIA PANAMA CANAL).					
MARSEILLES	9170	HAMBURG			9190
NAPLES	9456	ANTWERP			9089
LONDON	8992				

BRITISH COLUMBIA

AND

ITS HINTERLAND

SHOWING

WESTERN PORTIONS OF CANADA'S TRANSCONTINENTALS
THE PRAIRIE AREA
DIVIDING LINE OF EAST AND WEST TRAFFIC
THE GREAT FISHING GROUNDS OF THE COASTAL BELT
THE PRINCIPAL TOPOGRAPHIC FEATURES
THE MORE IMPORTANT STRATEGICAL POINTS

WITH INSETS OF

DISTANCES FROM VANCOUVER TO WORLD PORTS, AND
TYPICAL SECTIONS ACROSS THE PROVINCE

TO ILLUSTRATE

BRITISH COLUMBIA IN THE MAKING

J. B. THORNHILL, fecit. M. ADDISON, delinavit

115 110 105

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DIVIDING LINE OF EAST

CANADIAN NORTHERN G.T.P. EDMONTON TRANSCONTINENTAL GRAND TRUNK PACIFIC

Battleford Warman SASKATCHEWAN

Red Deer SASKATOON WEST TRAFFIC

PRAIRIE AREA OF WESTERN CANADA

CALGARY CANADIAN PACIFIC TRANSCONTINENTAL MOOSE JAW Swift Current

Lethbridge Medicine Hat SOUTHERN ROUTE

INTERNATIONAL BOUNDARY

BOUNDARY COUNTY

MONTANA

SPOKANE

IDAHO

BRITISH COLUMBIA

ROCKY MOUNTAINS

BANFF

Lake Fernie

NORTHERN INTERIOR AND COAST JUST SOUTH OF LATITUDE 53° NORTH

Ocean Depths Queen Charlotte Is. Hecate Straits Skidegate Inlet Prince Rupert One of the Gulf Islands CASCADES The C.P.R. runs in the Nechaco Valley North of this Plateau FRASER RIVER Tete Jaune Cache Sea Level PRAIRIES

Dense Forest | Dense Forest | Dense Forest | Open Forest Country with hay meadows | Scrub | Forest | Grass

SOUTHERN BRITISH COLUMBIA ALONG ROUTE OF C.P.R.

Vancouver I. Gulf of Georgia Delta & Valley of the Fraser Canyon at Hope Lytton Ashcroft Kamloops Salmon Arm GOLDEN RANGE Revelstoke SELKIRKS Columbia Valley ROCKIES Banff PRAIRIES Sea Level

Dense Forest | Arid Country | Scrub | Semi Arid Scrub Grass

TYPICAL SECTIONS ROUGHLY ¼ SCALE OF MAP

Kilometres
100 0 100 200 300 400

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